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**FERTILIZER REPORT**  
**1937**



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## FERTILIZER REPORT--1937

## INTRODUCTION

The Pennsylvania Fertilizer Law, Act of May 1, 1909, with subsequent amendments, requires the annual registration of all products intended for fertilizing or manuring purposes. The Act specifically exempts the dung of domestic animals, marl, lime and wood ashes.

Section 1 requires the following information to be shown on sacks or attached cards: (a) The number of pounds of fertilizer contained in the package; (b) the name, brand or trade mark under which the fertilizer is sold; (c) the name and principal address of the manufacturer, importer or other person putting the fertilizer on the market in this Commonwealth; (d) guarantee for nitrogen; (e) guarantee for total phosphoric acid, except in mixed and super-phosphate fertilizers; (f) guarantee for available phosphoric acid; (g) guarantee for potash soluble in distilled water.

In the case of Mixed Fertilizers, all guarantees must be in even units, no fractions being permitted, and they further must be guaranteed to contain at least 16 units of plant food, based upon guarantees for nitrogen, available phosphoric acid and water soluble potash. The minimum amount of any one element permitted in a fertilizer is 1%.

Applications for registration are forwarded to each licensed manufacturer at the end of the calendar year, and it is necessary to report on same the preceding year's tonnage sales of each brand in order that license or registration fee can be properly computed. Tonnage sales are likewise required for brands even though they are not to be reregistered.

The Agents of the Bureau of Foods and Chemistry are authorized to obtain official samples, which together with reports giving full information for each individual sample, are forwarded direct to the Laboratory where a check of records is made to determine whether the brand is registered. Where it is found that these official samples are duly registered, an analysis is conducted to ascertain whether or not the fertilizer meets its guaranteed analysis.

During the year 1937 the agents of the Department collected 1,380 official samples and of this number 1,353 representing 531 brands, registered by 46 manufacturers, were subjected to analysis and classified as follows:

	BRANDS	SAMPLES
Complete Fertilizers.....	397	1011
Ground Bone Fertilizers.....	15	24
Superphosphate Fertilizers.....	61	224
Lime Phosphate Fertilizers.....	12	18
Rock and Potash Fertilizers.....	35	62
Miscellaneous Fertilizers.....	11	14
Total	531	1353

## BRANDS REGISTERED AND TONNAGE SALES

The registration fee for each new brand of fertilizer is \$15, and where old brands are to be re-registered, the scale of fees is as follows: 0 to 150 tons, \$15; over 150 tons to 250 tons, \$20; over 250 to 400 tons, \$30; over 400 tons to 500 tons, \$40; over 500 tons, \$50.

Licenses were issued to 109 manufacturers to cover sales of their brands for the year 1937. These licenses included 1,052 brands of which 812 were mixed fertilizers and 240 so called "base" materials, such as nitrate of soda, sulphate of ammonia, bone, etc.

The 1937 applications for registration showed that 318,330 tons of all classes of fertilizers were sold during the year 1936 (compared with 295,048 tons sold during 1935) and classified as follows: Complete Fertilizers, 231,348 tons; Ground Bone Fertilizers, 2,791 tons; Superphosphate Fertilizers, 58,172 tons; Lime Phosphate Fertilizers, 8,532 tons; Ammoniated Phosphate Fertilizers, 92 tons; Rock and Potash Fertilizers, 10,470 tons; and Miscellaneous Fertilizers, including the following: Tankage, 1,588 tons; Dried Blood, 12 tons; Nitrate of Soda, 110 tons; Potash Salts, 631 tons; Sulphate of Ammonia, 574 tons; and unclassified 4,010 tons.

The 1936 tonnage figure reveals that there was supplied 7,200 tons of nitrogen, 36,137 tons of available phosphoric acid and 14,676 tons of water soluble potash or a total of 58,013 tons of plant food. The amount of plant food is in excess of that supplied during the year 1935, namely 53,466 tons.

### CONCLUSIONS

Of the 1,353 official samples analyzed, 111 or 8.20% were found to be deficient in one or more elements of plant food, compared with guarantees to the extent of .2% or more. The proportion of deficiencies is slightly higher than that reported for the year 1936.

Considering the plant food elements separately, 44 samples or 3.25% were found to be deficient in nitrogen, 43 or 3.18% deficient in phosphoric acid and 32 or 2.37% deficient in water soluble potash.

Of the total number of fertilizers analyzed, 1011 were complete fertilizers and 105 or 10.39% were found to be deficient, 44 or 4.35% deficient in nitrogen, 37 or 3.66% in available phosphoric acid and 32 or 3.17% in water soluble potash.

Where the word "tobacco" forms a part of the brand name, the potash must not be in the form of chloride. Official samples obtained with the word "tobacco" as a part of the brand name were, upon analysis, found to have the potash content in the form of sulphate.

There was 1 deficiency of total phosphoric acid in the Ground Bone Fertilizers, 1 Superphosphate Fertilizer was deficient in available phosphoric acid and 4 Rock and Potash Fertilizers were deficient in available phosphoric acid. The 14 Miscellaneous Fertilizers included 5 samples of Nitrate of Soda, 2 of Muriate of Potash, and 1 each of Sulphate of Ammonia, Tankage, Cyanamid, Phosphate and Tobacco, Calnitro, Milorganite and Mineral Colloids. Of this class no deficiencies were noted.

The average unit values, estimated from the average retail selling prices, were as follows: Nitrogen \$2.85, Available Phosphoric Acid \$1.05, Water Soluble Potash \$1.38.

The average retail selling price for Complete Fertilizers was \$29.26 a ton, compared with \$27.81 for 1936.

Considering the 1937 fertilizer inspection, it will be noted that 8.28% of all samples collected were found to be deficient, which is slightly higher than the previous year's inspection. Many of the samples were not seriously deficient and were, to a large extent, balanced by overages in other elements, so that there was no monetary loss to the consumer. Action was taken in those cases where the deficiencies were found to be of a serious nature.

TABLE I--DEFICIENCIES

CLASS OF FERTILIZERS	SAMPLES	Number Deficient in		
		NITROGEN	AVAILABLE PHOSPHORIC ACID	POTASH
Complete Fertilizers.....	1011	44	37	32
Ground Bone Fertilizers....	24	--	*1	--
Superphosphate Fertilizers..	224	--	1	--
Lime Phosphate Fertilizers..	18	--	--	--
Rock and Potash Fertilizers.	62	--	4	--
Miscellaneous Fertilizers...	14	--	--	--
Total.....	1353	44	43	32

\*Total Phosphoric Acid

TABLE II--AVERAGE ANALYSES AND RETAIL PRICES

FORM OF PLANT FOOD	COMPLETE FERTILIZERS	GROUND	SUPERPHOS-	ROCK AND
		BONE FERTIL- IZERS	PHATE FERTIL- IZERS*	POTASH FERTIL- IZERS
	Per Cent	Per Cent	Per Cent	Per Cent
Nitrogen.....	3.16	3.43	----	----
Total Phosphoric Acid.....	----	22.70	----	----
Available Phosphoric Acid..	10.62	----	18.54	14.62
Potash.....	6.59	----	----	6.66
Selling Price 1937.....	\$29.26	\$45.95	\$19.38	\$24.52
Selling Price 1936.....	\$27.81	\$40.63	\$17.64	\$23.08

\*Excluding Lime Phosphates

## KEY TO TABLES

The following tables include the results of chemical analyses of the official samples. Each sample was given a chemist's number and analyzed for the element or elements guaranteed.

The asterisk (\*) indicates those samples found to be deficient to the extent of .2% or more.

Table III. Complete Fertilizers, furnishing Nitrogen, Available Phosphoric Acid and Potash.

Table IV. Ground Bone Fertilizers, furnishing Nitrogen and Total Phosphoric Acid.

Table V. Superphosphate and Lime Phosphate Fertilizers, furnishing Available Phosphoric Acid.

Table VI. Rock and Potash Fertilizers, furnishing Available Phosphoric Acid and Potash.

Table VII. Miscellaneous Fertilizers, including Nitrate of Soda, Muriate of Potash, Cyanamid, Sulphate of Ammonia, Tankage, Phosphate and Tobacco, Calnitro, Millorganite and Mineral Colloids.

WARNING

"Section 5. Any person or persons selling, offering, or exposing for sale, any commercial fertilizer or any brand of the same, having a distinct trade-name, without the analysis required by section one of this act, or with an analysis stating that it contains a larger percentage of any one or more of the above-named constituents than is contained therein, or for the sale of which all the provisions of sections two and three have not been complied with, or any person violating any of the provisions of section four of this act, shall be guilty of a misdemeanor, and, on conviction, shall be sentenced to pay a fine of not less than twenty-five nor more than one hundred dollars for the first offense, and not less than two hundred dollars for each subsequent offense....."

The Department of Agriculture, as the agency charged by the Legislature with the enforcement of the provisions of the Fertilizer Law, copies of which are available upon request, insists upon strict compliance therewith.

\*Act of May 1, 1909, P. L. 344 as amended.

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TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		As Muritate P. ct.
	Found	Guar.	Found	Guar.	Found	Guar.	
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	
ACME GUANO CO., Baltimore, Md.							
Acme 1-10-5 (1987)	1.14	1.00	10.48	10.00	4.97	5.00	-----
Acme 2-8-10 (1974)	2.51	2.00	8.38	8.00	*9.46	10.00	-----
Acme 2-9-5 (1973)	2.15	2.00	9.22	9.00	5.35	5.00	-----
Acme 2-9-5 (2636)	2.28	2.00	9.78	9.00	5.21	5.00	-----
Acme 2-12-4 (1969)	2.03	2.00	11.85	12.00	5.42	4.00	-----
Acme 2-12-4 (2657)	2.30	2.00	12.42	12.00	4.36	4.00	-----
Acme 3-8-5 (1986)	3.01	3.00	8.04	8.00	5.76	5.00	-----
Acme 3-12-6 (1970)	3.18	3.00	12.40	12.00	6.22	6.00	-----
Acme 4-8-7 (1968)	4.02	4.00	8.05	8.00	7.09	7.00	-----
Acme 4-12-4 (2658)	4.29	4.00	12.75	12.00	4.35	4.00	-----
Acme Special 2-12-5 (2655)	2.16	2.00	12.43	12.00	*4.06	5.00	-----
Acme Vitaflor (2634)	4.28	4.00	7.72	7.00	6.92	5.00	-----
THE AMERICAN AGRICULTURAL CHEMICAL CO., New York, N. Y.							
AA Acme Fertilizer 1-10-5 (1361)	1.08	1.00	10.31	10.00	5.22	5.00	-----
AA Acme Fertilizer 1-10-5 (1536)	1.02	1.00	10.08	10.00	5.21	5.00	-----
AA Acme Fertilizer 1-10-5 (1614)	1.07	1.00	10.12	10.00	5.13	5.00	-----
AA Acme Fertilizer 1-10-5 (1800)	1.08	1.00	10.43	10.00	5.08	5.00	-----
AA Acme Fertilizer 1-10-5 (2319)	1.25	1.00	10.11	10.00	5.55	5.00	-----
AA Acme Fertilizer 1-10-5 (2484)	1.16	1.00	10.19	10.00	5.21	5.00	-----
AA Champion Fertilizer 2-9-5 (1419)	1.89	2.00	*8.53	8.00	5.39	5.00	-----
AA Champion Fertilizer 2-9-5 (1537)	2.03	2.00	9.21	8.00	5.03	5.00	-----
AA Champion Fertilizer 2-9-5 (1554)	2.14	2.00	9.09	9.00	5.32	5.00	-----
AA Champion Fertilizer 2-9-5 (1635)	2.16	2.00	9.43	9.00	4.90	5.00	-----
AA Champion Fertilizer 2-9-5 (2028)	2.57	2.00	*8.60	9.00	5.80	5.00	-----
AA Champion Fertilizer 2-9-5 (2273)	1.85	2.00	9.10	9.00	5.23	5.00	-----
AA Champion Fertilizer 2-9-5 (2520)	2.22	2.00	9.19	9.00	5.11	5.00	-----
AA Champion Fertilizer 2-9-5 (2611)	2.17	2.00	9.80	9.00	5.35	5.00	-----
AA Climax Fertilizer 3-12-6 (1477)	3.23	3.00	12.40	12.00	5.85	6.00	-----
AA Climax Fertilizer 3-12-8 (1606)	3.01	3.00	12.32	12.00	6.39	6.00	-----
AA Climax Fertilizer 3-12-6 (1647)	2.89	3.00	12.34	12.00	6.82	6.00	-----
AA Climax Fertilizer 3-12-6 (1752)	3.31	3.00	12.87	12.00	6.30	6.00	-----
AA Climax Fertilizer 3-12-6 (1798)	3.03	3.00	12.00	12.00	6.16	6.00	-----
AA Climax Fertilizer 3-12-6 (2040)	3.04	3.00	11.87	12.00	6.17	6.00	-----
AA Climax Fertilizer 3-12-6 (2299)	3.07	3.00	*12.20	12.00	6.25	6.00	-----
AA Climax Fertilizer 3-12-6 (2485)	3.19	3.00	*11.19	12.00	6.19	6.00	-----
AA Climax Fertilizer 3-12-6 (2535)	3.25	3.00	12.02	12.00	5.95	6.00	-----
AA Farmers Friend Fertilizer 2-12-4 (1390)	2.24	2.00	12.19	12.00	4.22	4.00	-----
AA Farmers Friend Fertilizer 2-12-4 (1605)	2.02	2.00	12.14	12.00	4.03	4.00	-----
AA Farmers Friend Fertilizer 2-12-4 (1649)	2.05	2.00	12.29	12.00	4.43	4.00	-----
AA Farmers Friend Fertilizer 2-12-4 (1822)	2.14	2.00	12.28	12.00	4.40	4.00	-----
AA Farmers Friend Fertilizer 2-12-4 (2309)	2.11	2.00	11.94	12.00	4.27	4.00	-----
AA Farmers Friend Fertilizer 2-12-4 (2436)	2.16	2.00	12.60	12.00	4.60	4.00	-----
AA Farmers Friend Fertilizer 2-12-4 (2558)	2.02	2.00	11.87	12.00	4.34	4.00	-----
AA Gilt Edge Fertilizer 2-16-4 (2568)	2.29	2.00	16.16	16.00	4.62	4.00	-----
AA Gladiator Fertilizer 4-8-7 (1608)	4.11	4.00	8.19	8.00	7.07	7.00	-----
AA Gladiator Fertilizer 4-8-7 (1750)	4.09	4.00	8.58	8.00	7.47	7.00	-----
AA Gladiator Fertilizer 4-8-7 (1854)	3.85	4.00	8.11	8.00	7.22	7.00	-----
AA Gladiator Fertilizer 4-8-7 (1875)	4.01	4.00	8.32	8.00	7.01	7.00	-----
AA Gladiator Fertilizer 4-8-7 (2196)	4.00	4.00	8.45	8.00	6.95	7.00	-----
AA Gladiator Fertilizer 4-8-7 (2295)	4.00	4.00	8.04	8.00	7.39	7.00	-----
AA Gladiator Fertilizer 4-8-7 (2490)	4.22	4.00	8.20	8.00	7.23	7.00	-----
AA Horse Shoe Fertilizer 2-12-6 (1603)	2.14	2.00	12.40	12.00	6.71	6.00	-----
AA Horse Shoe Fertilizer 2-12-6 (1652)	2.01	2.00	11.94	12.00	6.31	6.00	-----
AA Horse Shoe Fertilizer 2-12-6 (2420)	2.03	2.00	12.02	12.00	6.45	6.00	-----
AA Horse Shoe Fertilizer 2-12-6 (2487)	2.12	2.00	11.35	12.00	6.78	6.00	-----
AA Horse Shoe Fertilizer 2-12-6 (2529)	2.17	2.00	12.69	12.00	6.19	6.00	-----
AA Horse Shoe Fertilizer 2-12-6 (2565)	2.01	2.00	11.90	12.00	6.59	6.00	-----
AA Horse Show Fertilizer 2-8-10 (1389)	2.03	2.00	8.53	8.00	10.49	10.00	-----
AA Old Hickory Fertilizer 2-8-10 (1608)	2.01	2.00	8.17	8.00	10.03	10.00	-----
AA Old Hickory Fertilizer 2-8-10 (1608)	2.06	2.00	8.26	8.00	10.29	10.00	-----
AA Old Hickory Fertilizer 2-8-10 (1748)	2.01	2.00	8.04	8.00	10.34	10.00	-----
AA Old Hickory Fertilizer 2-8-10 (1799)	1.85	2.00	8.10	8.00	9.84	10.00	-----
AA Old Hickory Fertilizer 2-8-10 (2029)	2.07	2.00	8.04	8.00	10.30	10.00	-----
AA Old Hickory Fertilizer 2-8-10 (2296)	2.07	2.00	8.61	8.00	10.03	10.00	-----
AA Old Hickory Fertilizer 2-8-10 (2457)	2.03	2.00	8.30	8.00	10.10	10.00	-----
AA Old Hickory Fertilizer 2-8-10 (2488)	2.06	2.00	7.91	8.00	10.40	10.00	-----
AA Old Hickory Fertilizer 2-8-10 (2563)	2.17	2.00	12.09	12.00	4.22	4.00	-----
AA Pathfinder Fertilizer 4-12-4 (1538)	4.16	4.00	12.05	12.00	4.06	4.00	-----
AA Pathfinder Fertilizer 4-12-4 (1559)	4.09	4.00	12.25	12.00	4.21	4.00	-----
AA Pathfinder Fertilizer 4-12-4 (1611)	4.26	4.00	12.01	12.00	4.35	4.00	-----
AA Pathfinder Fertilizer 4-12-4 (1905)	4.02	4.00	12.16	12.00	4.30	4.00	-----
AA Pathfinder Fertilizer 4-12-4 (2419)	4.30	4.00	11.42	12.00	4.15	4.00	-----
AA Pathfinder Fertilizer 4-12-4 (2554)	4.02	4.00	12.05	12.00	4.72	4.00	-----
AA Pathfinder Fertilizer 4-12-4 (2564)	4.17	4.00	8.89	9.00	5.00	5.00	-----
AA Red Dog Fertilizer 2-9-5 (1364)	2.02	2.00	9.54	9.00	5.33	5.00	-----
AA Red Dog Fertilizer 2-9-5 (1612)	2.02	2.00	9.47	9.00	5.17	5.00	-----
AA Red Dog Fertilizer 2-9-5 (1853)	2.01	2.00	9.03	9.00	5.02	5.00	-----
AA Red Dog Fertilizer 2-9-5 (2486)	2.14	2.00	9.60	9.00	5.21	5.00	-----
AA Red Dog Fertilizer 2-9-5 (2528)	2.23	2.00	10.16	10.00	4.88	5.00	-----
AA Red Seal Fertilizer 5-10-5 (1648)	5.21	5.00	10.17	10.00	4.98	5.00	-----
AA Red Seal Fertilizer 5-10-5 (2197)	4.86	5.00	16.20	16.00	4.37	4.00	-----
AA Sweepstakes Fertilizer 3-8-10 (2492)	3.11	3.00	8.69	8.00	10.59	10.00	-----
AA Two in One Fertilizer 4-16-4 (1601)	4.14	4.00	16.24	16.00	4.20	4.00	-----
AA Two in One Fertilizer 4-16-4 (1751)	4.03	4.00	16.40	16.00	4.27	4.00	-----
AA Two in One Fertilizer 4-16-4 (1904)	4.17	4.00	16.16	16.00	4.23	4.00	-----
AA Two in One Fertilizer 4-16-4 (2039)	4.24	4.00	*14.49	16.00	4.64	4.00	-----
AA Two in One Fertilizer 4-16-4 (2274)	4.20	4.00	16.26	16.00	4.54	4.00	-----
AA Two in One Fertilizer 4-16-4 (2421)	4.27	4.00	16.20	16.00	4.37	4.00	-----
AA Two in One Fertilizer 4-16-4 (2483)	4.14	4.00	16.25	16.00	4.26	4.00	-----
AA Two in One Fertilizer 4-16-4 (2560)	4.24	4.00	16.04	16.00	4.54	4.00	-----
AA Two in One Fertilizer 4-16-4 (2560)	3.01	3.00	*11.80	12.00	6.97	6.00	-----
Agrico for Corn 3-12-8 (1417)	3.10	3.00	11.84	12.00	6.18	6.00	-----
Agrico for Corn 3-12-6 (1494)	3.24	3.00	12.12	12.00	6.58	6.00	-----
Agrico for Corn 3-12-8 (1555)	3.20	3.00	12.42	12.00	6.11	6.00	-----
Agrico for Corn 3-12-6 (1613)	3.20	3.00	12.02	12.00	6.28	6.00	-----
Agrico for Corn 3-12-6 (1872)	3.20	3.00	12.02	12.00			

\*Deficient

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
Agrico for Corn 3-12-6 (1900)	3.01	3.00	*11.38	12.00	6.54	6.00	----
Agrico for Corn 3-12-6 (2257)	3.10	3.00	12.00	12.00	6.08	6.00	----
Agrico for Corn 3-12-6 (2272)	3.02	3.00	12.10	12.00	6.22	6.00	----
Agrico for Corn 3-12-6 (2316)	3.02	3.00	12.10	12.00	6.03	6.00	----
Agrico for Corn 3-12-6 (2559)	3.21	3.00	11.83	12.00	6.92	6.00	----
Agrico for Fruit 9-6-6 (2085)	9.68	9.00	6.40	6.00	6.15	6.00	----
Agrico for Gardens 5-10-5 (2256)	5.27	5.00	10.00	10.00	5.26	5.00	----
Agrico for Grain 2-12-4 (1365)	2.25	2.00	12.13	12.00	4.21	4.00	----
Agrico for Grain 2-12-4 (1418)	1.88	2.00	11.90	12.00	4.06	4.00	----
Agrico for Grain 2-12-4 (1497)	2.18	2.00	12.16	12.00	4.35	4.00	----
Agrico for Grain 2-12-4 (1534)	1.94	2.00	11.82	12.00	3.90	4.00	----
Agrico for Grain 2-12-4 (1553)	2.57	2.00	12.00	12.00	4.20	4.00	----
Agrico for Grain 2-12-4 (1558)	2.27	2.00	12.18	12.00	4.29	4.00	----
Agrico for Grain 2-12-4 (1607)	2.16	2.00	12.66	12.00	4.17	4.00	----
Agrico for Grain 2-12-4 (1659)	2.32	2.00	12.59	12.00	4.40	4.00	----
Agrico for Grain 2-12-4 (1871)	2.20	2.00	12.63	12.00	4.26	4.00	----
Agrico for Grain 2-12-4 (1902)	2.18	2.00	12.01	12.00	4.28	4.00	----
Agrico for Grain 2-12-4 (2251)	2.29	2.00	12.22	12.00	4.36	4.00	----
Agrico for Grain 2-12-4 (2271)	2.27	2.00	12.19	12.00	4.19	4.00	----
Agrico for Grain 2-12-4 (2308)	2.14	2.00	12.05	12.00	4.25	4.00	----
Agrico for Grain 2-12-4 (2317)	1.86	2.00	12.39	12.00	4.19	4.00	----
Agrico for Grain 2-12-4 (2423)	2.05	2.00	12.08	12.00	4.20	4.00	----
Agrico for Grain 2-12-4 (2456)	2.20	2.00	12.24	12.00	4.12	4.00	----
Agrico for Grain 2-12-4 (2494)	2.19	2.00	12.02	12.00	4.10	4.00	----
Agrico for Grain 2-12-4 (2567)	2.03	2.00	12.38	12.00	4.28	4.00	----
Agrico for Pastures and Top Dressing 7-6-6 (1414)	7.29	7.00	6.34	6.00	6.09	6.00	----
Agrico for Pastures and Top Dressing 7-6-6 (1498)	6.95	7.00	6.18	6.00	6.29	6.00	----
Agrico for Pastures and Top Dressing 7-6-6 (1657)	7.19	7.00	6.32	6.00	6.42	6.00	----
Agrico for Pastures and Top Dressing 7-6-6 (1749)	7.45	7.00	6.36	6.00	6.62	6.00	----
Agrico for Pastures and Top Dressing 7-6-6 (1855)	*6.72	7.00	6.29	6.00	6.26	6.00	----
Agrico for Pastures and Top Dressing 7-6-6 (2086)	7.24	7.00	6.14	6.00	6.34	6.00	----
Agrico for Pastures and Top Dressing 7-6-6 (2532)	7.29	7.00	6.38	6.00	6.48	6.00	----
Agrico for Potatoes 4-8-7 (1363)	4.00	4.00	8.09	8.00	7.34	7.00	----
Agrico for Potatoes 4-8-7 (1391)	4.07	4.00	8.20	8.00	7.41	7.00	----
Agrico for Potatoes 4-8-7 (1416)	3.88	4.00	8.02	8.00	7.02	7.00	----
Agrico for Potatoes 4-8-7 (1495)	4.01	4.00	8.22	8.00	7.37	7.00	----
Agrico for Potatoes 4-8-7 (1535)	4.01	4.00	7.98	8.00	7.15	7.00	----
Agrico for Potatoes 4-8-7 (1557)	4.01	4.00	8.36	8.00	7.37	7.00	----
Agrico for Potatoes 4-8-7 (1615)	4.01	4.00	8.07	8.00	7.28	7.00	----
Agrico for Potatoes 4-8-7 (1656)	4.77	4.00	8.76	8.00	7.23	7.00	----
Agrico for Potatoes 4-8-7 (2035)	4.01	4.00	8.17	8.00	7.06	7.00	----
Agrico for Potatoes 4-8-7 (2253)	3.86	4.00	8.09	8.00	7.16	7.00	----
Agrico for Potatoes 4-8-7 (2299)	4.09	4.00	8.50	8.00	7.19	7.00	----
Agrico for Potatoes 4-8-7 (2318)	3.92	4.00	8.00	8.00	7.35	7.00	----
Agrico for Potatoes 4-8-7 (2533)	4.01	4.00	*7.20	8.00	7.41	7.00	----
Agrico for Potatoes 4-8-7 (2550)	3.85	4.00	8.92	8.00	7.07	7.00	----
Agrico for Potatoes 4-8-7 (1917)	4.03	4.00	8.08	8.00	10.90	10.00	----
Agrico for Tomatoes 4-14-6 (1901)	4.13	4.00	13.30	14.00	6.33	6.00	----
Agrico for Tomatoes 4-14-6 (2250)	4.25	4.00	14.51	14.00	6.38	6.00	----
Agrico for Truck 5-10-5 (1362)	5.18	5.00	10.27	10.00	5.07	5.00	----
Agrico for Truck 5-10-5 (1392)	5.13	5.00	10.22	10.00	5.17	5.00	----
Agrico for Truck 5-10-5 (1415)	5.07	5.00	9.88	10.00	5.55	5.00	----
Agrico for Truck 5-10-5 (1496)	5.06	5.00	10.23	10.00	5.19	5.00	----
Agrico for Truck 5-10-5 (1552)	5.26	5.00	10.03	10.00	5.21	5.00	----
Agrico for Truck 5-10-5 (1610)	5.11	5.00	10.43	10.00	5.05	5.00	----
Agrico for Truck 5-10-5 (2037)	5.10	5.00	9.91	10.00	5.31	5.00	----
Agrico for Truck 5-10-5 (2087)	5.17	5.00	10.23	10.00	5.17	5.00	----
Agrico for Truck 5-10-5 (2322)	5.05	5.00	10.00	10.00	4.92	5.00	----
Agrico for Truck 5-10-5 (2437)	5.12	5.00	10.34	10.00	5.31	5.00	----
Agrico for Truck 5-10-5 (2531)	4.85	5.00	9.90	10.00	5.42	5.00	----
Agrico for Truck 5-10-5 (2566)	5.00	5.00	10.01	10.00	5.78	5.00	----
Agrico for Wheat 2-12-6 (2254)	2.01	2.00	*11.79	12.00	6.23	6.00	----
Agrico for Wheat 2-12-6 (2424)	2.03	2.00	12.58	12.00	6.25	6.00	----
Agrico for Wheat 2-12-5 (2495)	2.23	2.00	12.28	12.00	6.01	6.00	----
Agrico for Wheat 2-12-6 (2527)	2.23	2.00	12.83	12.00	6.27	6.00	----
Agrico for Wheat 2-12-6 (2537)	2.04	2.00	13.53	12.00	7.18	6.00	----
Agrico for Wheat 2-12-6 (2557)	2.15	2.00	11.94	12.00	6.69	6.00	----
Agrico for Wheat 2-12-6 (2610)	2.01	2.00	12.11	12.00	6.57	6.00	----
Bowker's Sure Crop Fertilizer 1-10-5 (2042)	1.25	1.00	9.96	10.00	5.01	5.00	----
Hees Laurel Fertilizer 2-9-5 (2493)	2.24	2.00	9.05	9.00	5.08	5.00	----
Lister's Harvest Queen Fertilizer 2-9-5 (2297)	2.01	2.00	9.03	9.00	5.59	5.00	----
Patapsco Big Chief Fertilizer 2-9-5 (1479)	2.14	2.00	9.23	9.00	5.04	5.00	----
Patapsco Big Chief Fertilizer 2-9-5 (1602)	2.01	2.00	9.29	9.00	5.14	5.00	----
Patapsco Coon Brand Fertilizer 1-10-5 (1804)	1.14	1.00	10.18	10.00	5.44	5.00	----
Patapsco Coon Brand Fertilizer 1-10-5 (1853)	1.11	1.00	10.12	10.00	5.13	5.00	----
Patapsco Coon Brand Fertilizer 1-10-5 (1870)	1.07	1.00	10.20	10.00	5.58	5.00	----
Patapsco Coon Brand Fertilizer 1-10-5 (2255)	1.25	1.00	10.00	10.00	5.48	5.00	----
Patapsco Coon Brand Fertilizer 1-10-5 (2489)	1.10	1.00	10.15	10.00	5.02	5.00	----
ARMOUR FERTILIZER WORKS, Baltimore, Md.							
Armour's Big Crop Fertilizer 2-8-10 (1576)	2.01	2.00	8.21	8.00	11.87	10.00	----
Armour's Big Crop Fertilizer 2-8-10 (1422)	2.01	2.00	8.26	8.00	10.42	10.00	----
Armour's Big Crop Fertilizer 2-8-10 (1509)	1.85	2.00	8.52	8.00	10.63	10.00	----
*Deficient							

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
Armour's Big Crop Fertilizer 2-8-10 (1525)	2.01	2.00	B.12	B.00	10.92	10.00	----
Armour's Big Crop Fertilizer 2-B-10 (1769)	2.14	2.00	8.14	8.00	*9.78	10.00	----
Armour's Big Crop Fertilizer 2-8-10 (1229)	1.87	2.00	8.41	8.00	10.96	10.00	----
Armour's Big Crop Fertilizer 2-8-10 (2181)	2.02	2.00	B.14	8.00	11.14	10.00	----
Armour's Big Crop Fertilizer 2-8-10 (2405)	2.04	2.00	8.18	B.00	10.69	10.00	----
Armour's Big Crop Fertilizer 2-8-10 (2513)	2.03	2.00	8.80	8.00	10.22	10.00	----
Armour's Big Crop Fertilizer 2-8-10 (2553)	1.91	2.00	B.28	8.00	10.02	10.00	----
Armour's Big Crop Fertilizer 2-8-10 (2654)	2.02	2.00	8.18	8.00	10.74	10.00	----
Armour's Big Crop Fertilizer 2-9-5 (1375)	2.31	2.00	9.36	9.00	5.16	5.00	----
Armour's Big Crop Fertilizer 2-9-5 (1507)	2.10	2.00	9.90	9.00	5.21	5.00	----
Armour's Big Crop Fertilizer 2-9-5 (1523)	2.01	2.00	9.13	9.00	5.34	5.00	----
Armour's Big Crop Fertilizer 2-9-5 (1801)	2.01	2.00	9.42	9.00	5.36	5.00	----
Armour's Big Crop Fertilizer 2-9-5 (1925)	2.01	2.00	9.63	9.00	5.63	5.00	----
Armour's Big Crop Fertilizer 2-9-5 (2031)	2.01	2.00	9.15	9.00	5.96	5.00	----
Armour's Big Crop Fertilizer 2-9-5 (2182)	2.09	2.00	9.02	9.00	5.46	5.00	----
Armour's Big Crop Fertilizer 2-9-5 (2222)	2.00	2.00	9.34	9.00	5.79	5.00	----
Armour's Big Crop Fertilizer 2-9-5 (2390)	2.05	2.00	9.21	9.00	5.40	5.00	----
Armour's Big Crop Fertilizer 2-9-5 (2516)	2.10	2.00	9.50	9.00	5.42	5.00	----
Armour's Big Crop Fertilizer 2-9-5 (2652)	2.01	2.00	9.26	9.00	5.40	5.00	----
Armour's Big Crop Fertilizer 2-12-2 (1423)	1.87	2.00	12.02	12.00	2.09	2.00	----
Armour's Big Crop Fertilizer 2-12-2 (1517)	2.15	2.00	11.98	12.00	2.39	2.00	----
Armour's Big Crop Fertilizer 2-12-4 (1374)	2.02	2.00	12.13	12.00	4.13	4.00	----
Armour's Big Crop Fertilizer 2-12-4 (1530)	2.13	2.00	12.22	12.00	4.38	4.00	----
Armour's Big Crop Fertilizer 2-12-4 (1666)	2.09	2.00	12.38	12.00	4.10	4.00	----
Armour's Big Crop Fertilizer 2-12-4 (1805)	2.11	2.00	12.05	12.00	4.56	4.00	----
Armour's Big Crop Fertilizer 2-12-4 (1919)	1.92	2.00	12.27	12.00	4.46	4.00	----
Armour's Big Crop Fertilizer 2-12-4 (2032)	1.88	2.00	11.97	12.00	4.29	4.00	----
Armour's Big Crop Fertilizer 2-12-4 (2038)	2.14	2.00	12.03	12.00	4.17	4.00	----
Armour's Big Crop Fertilizer 2-12-4 (2219)	1.83	2.00	12.25	12.00	4.28	4.00	----
Armour's Big Crop Fertilizer 2-12-4 (2391)	2.03	2.00	12.35	12.00	4.06	4.00	----
Armour's Big Crop Fertilizer 2-12-4 (2444)	2.05	2.00	12.16	12.00	4.23	4.00	----
Armour's Big Crop Fertilizer 2-12-6 (1378)	2.03	2.00	12.27	12.00	6.41	6.00	----
Armour's Big Crop Fertilizer 2-12-6 (1524)	2.03	2.00	12.45	12.00	*5.73	6.00	----
Armour's Big Crop Fertilizer 2-12-6 (1840)	2.01	2.00	12.22	12.00	6.45	6.00	----
Armour's Big Crop Fertilizer 2-12-6 (1920)	2.00	2.00	12.06	12.00	6.59	6.00	----
Armour's Big Crop Fertilizer 2-12-6 (2195)	1.91	2.00	12.49	12.00	6.58	6.00	----
Armour's Big Crop Fertilizer 2-12-6 (2392)	2.02	2.00	12.10	12.00	6.64	6.00	----
Armour's Big Crop Fertilizer 2-12-6 (2406)	2.02	2.00	12.12	12.00	6.37	6.00	----
Armour's Big Crop Fertilizer 2-12-6 (2517)	2.03	2.00	12.07	12.00	6.54	6.00	----
Armour's Big Crop Fertilizer 2-12-6 (2551)	2.50	2.00	*11.56	12.00	7.62	6.00	----
Armour's Big Crop Fertilizer 2-12-6 (2665)	2.02	2.00	12.13	12.00	6.73	6.00	----
Armour's Big Crop Fertilizer 2-12-8 (192B)	1.90	2.00	12.24	12.00	B.50	B.00	----
Armour's Big Crop Fertilizer 3-12-6 (2208)	2.87	3.00	12.22	12.00	6.79	6.00	----
Armour's Big Crop Fertilizer 3-12-6 (2220)	2.81	3.00	12.72	12.00	6.78	6.00	----
Armour's Big Crop Fertilizer 3-12-6 (2515)	3.01	3.00	12.15	12.00	6.39	6.00	----
Armour's Big Crop Fertilizer 4-8-7 (1373)	3.94	4.00	B.39	8.00	7.26	7.00	----
Armour's Big Crop Fertilizer 4-8-7 (1424)	4.17	4.00	8.17	8.00	7.20	7.00	----
Armour's Big Crop Fertilizer 4-B-7 (1508)	4.01	4.00	8.12	8.00	7.26	7.00	----
Armour's Big Crop Fertilizer 4-8-7 (1518)	4.06	4.00	7.98	8.00	7.43	7.00	----
Armour's Big Crop Fertilizer 4-8-7 (1668)	4.20	4.00	8.38	8.00	7.41	7.00	----
Armour's Big Crop Fertilizer 4-8-7 (1768)	4.02	4.00	B.21	B.00	7.71	7.00	----
Armour's Big Crop Fertilizer 4-8-7 (1924)	3.83	4.00	8.26	B.00	7.37	7.00	----

\*Deficient

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
Armour's Big Crop Fertilizer 4-8-7 (2033)	3.85	4.00	8.09	B.00	7.1B	7.00	----
Armour's Big Crop Fertilizer 4-8-7 (2615)	4.15	4.00	B.20	B.00	7.16	7.00	----
Armour's Big Crop Fertilizer 4-12-4 (1381)	4.0B	4.00	12.10	12.00	4.00	4.00	----
Armour's Big Crop Fertilizer 4-12-4 (1529)	4.10	4.00	12.25	12.00	4.97	4.00	----
Armour's Big Crop Fertilizer 4-12-4 (1664)	3.81	4.00	12.49	12.00	4.31	4.00	----
Armour's Big Crop Fertilizer 4-12-4 (1804)	3.87	4.00	11.92	12.00	4.22	4.00	----
Armour's Big Crop Fertilizer 4-12-4 (2555)	4.15	4.00	11.9B	12.00	4.63	4.00	----
Armour's Big Crop Fertilizer 4-12-4 (2617)	*3.07	4.00	12.14	12.00	4.39	4.00	----
Armour's Big Crop Fertilizer 4-12-4 (2664)	*3.45	4.00	13.54	12.00	4.00	4.00	----
Armour's Big Crop Fertilizer 4-16-4 (1377)	4.06	4.00	16.64	16.00	4.20	4.00	----
Armour's Big Crop Fertilizer 4-16-4 (152B)	4.04	4.00	16.16	16.00	4.24	4.00	----
Armour's Big Crop Fertilizer 4-16-4 (1669)	*3.80	4.00	16.54	16.00	4.23	4.00	----
Armour's Big Crop Fertilizer 4-16-4 (1841)	3.86	4.00	16.30	16.00	4.35	4.00	----
Armour's Big Crop Fertilizer 4-16-4 (1927)	4.02	4.00	16.36	16.00	4.16	4.00	----
Armour's Big Crop Fertilizer 4-16-4 (2612)	4.07	4.00	16.74	16.00	4.7B	4.00	----
Armour's Big Crop Fertilizer 4-16-4 (2556)	4.17	4.00	16.44	16.00	4.41	4.00	----
Armour's Big Crop Fertilizer 4-16-4 (2619)	4.06	4.00	17.44	16.00	4.19	4.00	----
Armour's Big Crop Fertilizer 5-10-5 (1380)	*4.7B	5.00	10.32	10.00	5.27	5.00	----
Armour's Big Crop Fertilizer 5-10-5 (1520)	5.22	5.00	10.12	10.00	5.74	5.00	----
Armour's Big Crop Fertilizer 5-10-5 (2543)	*4.05	5.00	9.86	10.00	5.04	5.00	----
Armour's Big Crop Fertilizer B-16-14 (1766)	7.9B	B.00	16.84	16.00	14.22	14.00	----
Armour's Big Crop Grape King 5-8-B (1822)	4.85	5.00	8.01	8.00	9.04	B.00	----
Armour's Big Crop Special Mixture 1-10-5 (1506)	1.17	1.00	10.29	10.00	5.50	5.00	----
Armour's Big Crop Special Mixture 1-10-6 (2443)	1.22	1.00	11.04	10.00	5.59	5.00	----
Armour's Garden and Lawn Fertilizer 4-B-6 (1532)	4.23	4.00	B.4B	B.00	6.03	6.00	----
Armour's Special Top Dresser 10-6-4 (1379)	*9.2B	10.00	6.55	6.00	4.16	4.00	----
Armour's Special Turf Fertilizer 10-8-6 (2625)	*9.32	10.00	B.4B	B.00	6.2B	6.00	----
BALTIMORE FERTILIZER COMPANY, Baltimore, Md.							
Honest 1-10-5 (1930)	1.31	1.00	11.38	10.00	6.24	6.00	----
Honest 1-10-5 (24B1)	1.29	1.00	11.13	10.00	5.40	5.00	----
Honest 2-B-10 (1591)	2.76	2.00	B.97	B.00	9.91	10.00	----
Honest 2-B-10 (2471)	2.50	2.00	9.47	B.00	10.11	10.00	----
Honest 2-9-5 (1931)	2.32	2.00	10.65	9.00	6.11	5.00	----
Honest 2-9-5 (24B0)	2.08	2.00	10.29	9.00	6.15	5.00	----
Honest 2-12-4 (1590)	2.29	2.00	12.06	12.00	6.77	4.00	----
Honest 2-12-4 (2469)	2.66	2.00	13.0B	12.00	4.04	4.00	----
Honest 4-8-7 (1932)	4.29	4.00	B.94	8.00	8.21	7.00	----
BAUGH & SONS COMPANY, Philadelphia, Pa.							
Baugh's Activated Raw Bone Meal with Potash (2540)	6.95	6.00	9.66	9.00	6.7B	5.00	----
Baugh's Advanced Growers Special (1701)	5.05	5.00	B.12	B.00	7.10	7.00	----
Baugh's Balanced Plant Food (1623)	4.11	4.00	12.35	12.00	4.54	4.00	----
Baugh's Balanced Plant Food (1706)	4.08	4.00	12.20	12.00	4.33	4.00	----
Baugh's Balanced Plant Food (1810)	4.10	4.00	12.15	12.00	4.55	4.00	----
Baugh's Balanced Plant Food (2179)	4.10	4.00	12.26	12.00	4.67	4.00	----
Baugh's Commercial Crop Compound 2-B-10 (1340)	2.16	2.00	B.46	B.00	10.11	10.00	----
Baugh's Commercial Crop Compound 2-B-10 (1513)	2.07	2.00	B.28	B.00	10.08	10.00	----
Baugh's Commercial Crop Compound 2-8-10 (169B)	2.12	2.00	B.06	B.00	9.9B	10.00	----
Baugh's Commercial Crop Compound 2-B-10 (1823)	2.12	2.00	B.39	B.00	10.12	10.00	----
Baugh's Commercial Crop Compound 2-B-10 (1867)	2.12	2.00	B.13	B.00	*9.70	10.00	----
Baugh's Commercial Crop Compound 2-B-10 (20B4)	2.11	2.00	B.10	8.00	*9.72	10.00	----
Baugh's Commercial Crop Compound 2-B-10 (2667)	2.10	2.00	8.36	B.00	13.20	10.00	----
Baugh's Commercial Crop Compound 2-B-10 (2674)	2.19	2.00	8.09	B.00	10.58	10.00	----
Baugh's Complete Animal Base 2-9-5 (1342)	2.20	2.00	9.17	9.00	5.61	5.00	----
Baugh's Complete Animal Base 2-9-5 (1514)	2.02	2.00	9.1B	9.00	5.29	5.00	----
Baugh's Complete Animal Base 2-9-5 (1624)	2.10	2.00	10.10	9.00	5.67	5.00	----
Baugh's Complete Animal Base 2-9-5 (1702)	2.07	2.00	9.09	9.00	5.22	5.00	----
Baugh's Complete Animal Base 2-9-5 (1B25)	2.01	2.00	9.22	9.00	5.61	5.00	----
Baugh's Complete Animal Base 2-9-5 (209B)	2.0B	2.00	B.97	9.00	5.00	6.00	----
Baugh's Complete Animal Base 2-9-5 (2314)	2.13	2.00	9.04	9.00	4.95	5.00	----
*Deficient					/		

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	Found	Guar.	As Murate
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
Baugh's Compleata Animal Base 2-9-5 (2373)	2.08	2.00	9.39	9.00	5.28	5.00	----
Baugh's Complete Animal Baee 2-9-5 (2414)	2.10	2.00	9.19	9.00	5.41	5.00	----
Baugh's Compleata Animal Baee 2-9-5 (2459)	2.16	2.00	9.17	9.00	5.06	5.00	----
Baugh's Compleata Animal Basa 2-9-5 (2666)	2.09	2.00	9.52	9.00	5.01	5.00	----
Baugh's Compleats Pastura 6-6-5 (2101)	6.96	6.00	6.34	6.00	5.39	5.00	----
Baugh's Complete Paetura 6-6-5 (2581)	*5.01	6.00	9.06	6.00	5.93	5.00	----
Baugh's Corn and Oats Fertilizer 2-12-2 (2161)	2.08	2.00	*11.07	12.00	6.80	2.00	----
Baugh's Double Eagle Phosphate 2-12-4 (1344)	2.19	2.00	12.15	12.00	4.24	4.00	----
Baugh's Double Eagla Phosphate 2-12-4 (1566)	3.79	2.00	12.10	12.00	4.98	4.00	----
Baugh's Double Eagle Phosphata 2-12-4 (1807)	2.81	2.00	12.37	12.00	4.33	4.00	----
Baugh's Double Eagla Phosphata 2-12-4 (1868)	2.02	2.00	12.16	12.00	4.36	4.00	----
Baugh's Double Eagle Phosphata 2-12-4 (2100)	2.10	2.00	11.89	12.00	4.26	4.00	----
Baugh's Double Eagle Phosphate 2-12-4 (2193)	2.14	2.00	12.15	12.00	4.20	4.00	----
Baugh's Double Eagle Phosphate 2-12-4 (2302)	2.28	2.00	12.00	12.00	4.67	4.00	----
Baugh's Double Eagle Phosphate 2-12-4 (2372)	2.10	2.00	12.34	12.00	4.53	4.00	----
Baugh's Double Eagle Phoephata 2-12-4 (2415)	2.17	2.00	12.12	12.00	4.22	4.00	----
Baugh's Double Power Fartilizer 4-16-4 (1705)	4.17	4.00	16.64	16.00	4.29	4.00	----
Baugh's Double Powar Fartilizer 4-16-4 (1624)	4.21	4.00	16.60	16.00	4.66	4.00	----
Baugh's Double Power Fertilizar 4-16-4 (2416)	3.85	4.00	16.28	16.00	4.19	4.00	----
Baugh's Double Power Fertilizer 4-16-4 (2681)	4.24	4.00	16.12	16.00	4.67	4.00	----
Baugh's Excaleior Mixture 1-10-5 (2097)	1.11	1.00	10.03	10.00	5.30	5.00	----
Baugh's Excalsior Mixtura 1-10-5 (2374)	1.17	1.00	10.24	10.00	5.13	5.00	----
Baugh's Excalsior Mixtura 1-10-5 (2511)	1.15	1.00	10.00	10.00	5.59	5.00	----
Baugh's Half and Half Mixtura 2-9-5 (2177)	2.17	2.00	9.67	9.00	5.31	5.00	----
Baugh's Half Century Parfection Brand 4-8-7 (1515)	3.91	4.00	8.39	8.00	7.58	7.00	----
Baugh's Half Century Perfection Brand 4-8-7 (1565)	4.03	4.00	8.12	8.00	7.53	7.00	----
Baugh's Half Century Perfection Brand 4-8-7 (1625)	4.02	4.00	8.16	8.00	7.58	7.00	----
Baugh's Half Century Perfection Brand 4-8-7 (1809)	4.09	4.00	8.24	8.00	7.76	7.00	----
Baugh's Half Cntry Perfection Brend 4-8-7 (1869)	3.97	4.00	8.45	8.00	7.71	7.00	----
Baugh's Half Century Perfection Brand 4-8-7 (2099)	4.17	4.00	8.16	8.00	7.41	7.00	----
Baugh's Half Century Parfection Brand 4-8-7 (2312)	4.01	4.00	8.14	8.00	7.59	7.00	----
Baugh's High Grada Fish Brand 3-12-6 (2103)	2.97	3.00	12.95	12.00	6.28	6.00	----
Baugh's Old Depandable Potato Grower 4-8-10 (1345)	4.04	4.00	8.12	8.00	9.92	10.00	----
Baugh's Old Dapandbla Potato Grower 4-8-10 (1626)	4.01	4.00	8.24	8.00	11.34	10.00	----
Baugh's Old Dependabla Potato Growar 4-8-10 (1700)	4.07	4.00	8.02	8.00	10.61	10.00	----
Baugh's Peruvian Guano Substituta 4-8-5 (1703)	4.01	4.00	8.27	8.00	5.28	5.00	----
Baugh's Peruvian Guano Substituta 4-8-5 (2102)	3.85	4.00	8.16	8.00	5.37	5.00	----
Baugh's Potato and Truck Special 4-8-6 (1343)	4.01	4.00	8.28	8.00	6.03	6.00	----
Baugh's Potato and Truck Special 4-8-6 (2178)	3.81	4.00	8.20	8.00	6.55	6.00	----
Baugh's Potato and Truck Special 4-8-6 (2288)	4.02	4.00	8.38	8.00	6.31	6.00	----
Baugh's Special Potato Manure 2-9-5 (2192)	2.16	2.00	9.33	9.00	5.31	5.00	----
Baugh's Spacial Potato Manura 2-9-5 (2304)	2.02	2.00	9.25	9.00	5.29	5.00	----
Baugh's Tha Old Stand-By (2305)	2.19	2.00	12.46	12.00	4.16	2.00	----
Baugh's Three-Quarter Century Perfection Brand 3-12-6 (1338)	3.74	3.00	12.19	12.00	7.11	6.00	----
Baugh's Threa-Quarter Century Perfection Brand 3-12-6 (2311)	3.14	3.00	12.64	12.00	6.23	6.00	----
Baugh's Truckars Favorite 5-10-5 (1339)	5.25	5.00	10.53	10.00	5.20	5.00	----
Baugh's Truckars Favorite 5-10-5 (1567)	*4.70	5.00	10.31	10.00	5.38	5.00	----
Baugh's Truckars Favorite 5-10-5 (1704)	5.30	5.00	10.42	10.00	5.15	5.00	----
Baugh's Truckars Favorita 5-10-5 (1826)	4.89	5.00	10.21	10.00	5.12	5.00	----
Baugh's Whaat Fertilizer (2460)	2.16	2.00	13.44	12.00	6.23	6.00	----
Baugh's 8-16-14 (1627)	*7.80	8.00	17.06	16.00	*13.61	14.00	----
Baugh's 8-16-14 (1811)	8.15	8.00	16.20	16.00	14.26	14.00	----
Baughgro (2541)	4.01	4.00	13.55	12.00	4.48	4.00	----
HERBERT ERYANT, INCORPORATED Alexandria, Va.							
Bryants Inc. 2-8-10 (1733)	2.01	2.00	8.36	8.00	11.04	10.00	----
Bryants Inc. 2-8-10 (2354)	2.00	2.00	8.56	8.00	11.46	10.00	----
Bryants Inc. 2-9-5 (2585)	2.18	2.00	9.80	9.00	5.08	5.00	----
Bryants Inc. 2-12-4 (2382)	2.20	2.00	12.13	12.00	4.35	4.00	----
Bryants Inc. 3-10-5 (1729)	3.18	3.00	10.24	10.00	6.20	5.00	----
Bryants Inc. 3-10-5 (2380)	3.25	3.00	10.14	10.00	6.25	5.00	----
Bryants Inc. 3-12-6 (1731)	3.05	3.00	12.37	12.00	5.97	6.00	----
Bryants Inc. 3-12-6 (2381)	3.32	3.00	11.94	12.00	7.20	6.00	----
Bryants Inc. 4-8-7 (1739)	4.31	4.00	8.48	8.00	8.02	7.00	----
Bryants Inc. 4-8-7 (2379)	4.29	4.00	8.14	8.00	8.60	7.00	----

\*Deficient

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
Sryants Inc. 4-8-10 (1738)	4.00	4.00	8.18	8.00	10.81	10.00	---
Sryants Inc. 4-8-10 (2386)	4.10	4.00	8.40	8.00	10.08	10.00	---
Sryants Inc. 4-12-4 (1732)	4.03	4.00	12.24	12.00	4.40	4.00	---
Sryanta Inc. 4-12-4 (2383)	4.13	4.00	12.08	12.00	4.40	4.00	---
Sryants Inc. 4-16-4 (1728)	*3.33	4.00	16.52	16.00	3.98	4.00	---
Sryanta Inc. 5-10-5 (1737)	5.03	5.00	9.88	10.00	5.09	5.00	---
Cenuine Fish Phosphate and Potash 2-9-5 (1734)	2.15	2.00	9.22	9.00	5.31	5.00	---
Golden Grain Grower 2-12-4 (1730)	2.31	2.00	12.59	12.00	4.38	4.00	---
W. S. CAPLES & SON, Johnstown, Pa.							
Cambria's Potato and Truck 2-10-6 (1314)	1.84	2.00	10.22	10.00	6.08	6.00	---
Cambria's Standard Phosphate 2-10-4 (1313)	2.01	2.00	10.03	10.00	4.80	4.00	---
CARLISLE FERTILIZER WORKS, INC., Carlisle, Pa.							
Carlisle 1-10-5 (1593)	1.31	1.00	11.70	10.00	5.99	5.00	---
Carlisle 1-10-5 (2468)	1.31	1.00	10.25	10.00	5.45	5.00	---
Carlisle 2-9-5 (1586)	2.18	2.00	9.39	9.00	5.90	5.00	---
Carlisle 2-9-5 (2467)	2.24	2.00	9.34	9.00	5.98	5.00	---
Carlisle 4-8-7 (1587)	4.50	4.00	8.11	8.00	7.97	7.00	---
Carlisle 4-8-7 (2475)	4.27	4.00	9.70	8.00	7.16	7.00	---
Carlisle 5-10-5 (1588)	5.61	5.00	10.30	10.00	5.85	5.00	---
CENTRAL CHEMICAL CORPORATION OF MARYLAND, Hagerstown, Md.							
Farmrite Excelsior 2-9-5 (2501)	2.02	2.00	9.26	9.00	5.23	5.00	---
Farmrite Excelsior 2-9-5 (2521)	2.07	2.00	9.57	9.00	5.56	5.00	---
Farmrite Fertilizer 2-12-6 (2504)	2.31	2.00	12.51	12.00	7.20	6.00	---
Farmrite Fertilizer 2-12-6 (2630)	2.18	2.00	12.02	12.00	6.57	6.00	---
Farmrite Fish Brand 2-12-6 (2506)	2.01	2.00	12.85	12.00	6.18	6.00	---
Farmrite Fish Brand 2-12-6 (2520)	2.04	2.00	12.05	12.00	6.83	6.00	---
Farmrite Golden Grain 3-12-6 (2505)	3.17	3.00	12.40	12.00	6.33	6.00	---
Farmrite Golden Grain 3-12-6 (2519)	3.07	3.00	11.83	12.00	6.44	6.00	---
Farmrite Grain Food 2-12-4 (2502)	2.00	2.00	12.40	12.00	4.39	4.00	---
Farmrite Crein Food 2-12-4 (2518)	2.01	2.00	12.03	12.00	4.60	4.00	---
Farmrite Crein Food 2-12-4 (2601)	2.19	2.00	12.32	12.00	4.76	4.00	---
Farmrite Imperial 2-8-10 (2455)	2.00	2.00	8.18	8.00	10.88	10.00	---
Farmrite Imperial 2-8-10 (2500)	2.03	2.00	8.02	8.00	10.82	10.00	---
COOPERATIVE G.L.F. SOIL BUILDING SERVICE, INC., New York, N. Y.							
G.L.F. 2-8-10 (Non-Acid) (2162)	2.18	2.00	8.11	8.00	10.19	10.00	---
G.L.F. 2-8-10 (Non-Acid) (2432)	2.28	2.00	9.38	8.00	9.85	10.00	---
G.L.F. 2-9-5 Special Mixture (1640)	2.24	2.00	9.10	9.00	5.30	5.00	---
G.L.F. 2-12-4 (Non-Acid) (1863)	2.21	2.00	12.34	12.00	4.70	4.00	---
G.L.F. 2-12-4 (Non-Acid) (1879)	2.63	2.00	12.26	12.00	4.92	4.00	---
G.L.F. 2-12-4 (Non-Acid) (2438)	2.22	2.00	12.38	12.00	4.64	4.00	---
G.L.F. 3-12-6 (Non-Acid) (1574)	3.30	3.00	12.33	12.00	7.32	6.00	---
G.L.F. 3-12-6 (Non-Acid) (1864)	3.38	3.00	12.19	12.00	6.29	6.00	---
G.L.F. 4-8-7 (Non-Acid) (1578)	4.29	4.00	8.13	8.00	7.68	7.00	---
G.L.F. 4-8-7 (Non-Acid) (1641)	4.30	4.00	8.29	8.00	7.68	7.00	---
G.L.F. 4-8-7 (Non-Acid) (1885)	4.28	4.00	8.07	8.00	7.91	7.00	---
G.L.F. 4-8-12 (Non-Acid) (2163)	*3.59	4.00	8.22	8.00	12.07	12.00	---
G.L.F. 4-12-4 (Non-Acid) (1573)	4.31	4.00	12.12	12.00	4.87	4.00	---
G.L.F. 4-12-4 (Non-Acid) (1642)	4.31	4.00	12.22	12.00	4.87	4.00	---
G.L.F. 4-12-4 (Non-Acid) (1881)	4.19	4.00	12.10	12.00	5.43	4.00	---
G.L.F. 4-12-4 (Non-Acid) (2431)	4.01	4.00	12.00	12.00	4.47	4.00	---
G.L.F. 4-16-4 (Non-Acid) (1572)	4.29	4.00	16.16	16.00	4.71	4.00	---
G.L.F. 4-16-4 (Non-Acid) (1866)	4.14	4.00	16.28	16.00	5.03	4.00	---
G.L.F. 4-16-4 (Non-Acid) (1884)	4.03	4.00	*15.04	16.00	5.96	4.00	---
G.L.F. 4-16-4 (Non-Acid) (2569)	4.31	4.00	16.24	16.00	5.54	4.00	---
G.L.F. 5-10-5 (Non-Acid) (1571)	5.03	5.00	10.06	10.00	5.56	5.00	---
G.L.F. 5-10-5 (Non-Acid) (1577)	5.12	5.00	10.18	10.00	5.80	5.00	---
G.L.F. 5-10-5 (Non-Acid) (1865)	5.15	5.00	10.34	10.00	5.56	5.00	---
G.L.F. 5-10-5 (Non-Acid) (1883)	5.01	5.00	10.22	10.00	6.13	5.00	---
G.L.F. 5-10-10 (Non-Acid) (1575)	5.06	5.00	10.02	10.00	10.77	10.00	---
G.L.F. 5-10-10 (Non-Acid) (2169)	4.87	5.00	10.00	10.00	10.00	10.00	---
G.L.F. 8-16-14 (2168)	8.22	8.00	16.24	16.00	15.17	14.00	---
G.L.F. Gro-Leaf 6-6-5 (Non-Acid) (1886)	5.97	6.00	6.48	6.00	5.80	5.00	---
CUMBERLAND VALLEY COOPERATIVE ASSOCIATION, Shippensburg, Pa.							
Old Reliable Bert Special 3-12-6 (1596)	*2.40	3.00	12.60	12.00	7.95	6.00	---
Old Reliable Bert Special 3-12-6 (2478)	2.83	3.00	12.17	12.00	7.19	6.00	---
Old Reliable Tip Top 2-9-5 (1598)	2.16	2.00	10.56	9.00	5.84	5.00	---
DAVISON CHEMICAL CORPORATION, Baltimore, Md.							
Davco Fertilizer 1-10-5 (1755)	1.11	1.00	*9.62	10.00	6.01	5.00	---
Davco Fertilizer 1-10-5 (2153)	1.31	1.00	10.05	10.00	*4.74	5.00	---
Davco Fertilizer 1-10-5 (2323)	1.15	1.00	10.06	10.00	5.44	5.00	---
Davco Fertilizer 2-8-10 (1309)	2.11	2.00	8.61	8.00	10.10	10.00	---
Davco Fertilizer 2-8-10 (2266)	2.02	2.00	*7.50	8.00	10.27	10.00	---
Davco Fertilizer 2-8-10 (2330)	2.02	2.00	8.37	8.00	10.76	10.00	---
Davco Fertilizer 2-8-10 (2403)	1.87	2.00	*7.66	8.00	*9.72	10.00	---
Davco Fertilizer 2-9-5 (1310)	2.14	2.00	9.32	9.00	6.38	5.00	---
Davco Fertilizer 2-9-5 (2151)	2.02	2.00	9.01	9.00	5.31	5.00	---
Davco Fertilizer 2-9-5 (2241)	2.06	2.00	9.04	9.00	5.65	5.00	---
Davco Fertilizer 2-9-5 (2326)	2.11	2.00	9.16	9.00	5.50	5.00	---
Davco Fertilizer 2-9-5 (2402)	2.02	2.00	9.30	9.00	4.85	5.00	---
Davco Fertilizer 2-12-2 (2597)	2.17	2.00	12.26	12.00	2.48	2.00	---
Davco Fertilizer 2-12-4 (1311)	2.09	2.00	12.44	12.00	4.22	4.00	---
Davco Fertilizer 2-12-4 (1438)	2.15	2.00	12.06	12.00	4.08	4.00	---
Davco Fertilizer 2-12-4 (2149)	2.24	2.00	12.22	12.00	4.54	4.00	---
Davco Fertilizer 2-12-4 (2225)	2.24	2.00	12.64	12.00	4.10	4.00	---
Davco Fertilizer 2-12-4 (2233)	2.14	2.00	11.94	12.00	4.49	4.00	---
Davco Fertilizer 2-12-4 (2329)	2.20	2.00	12.27	12.00	4.11	4.00	---
Davco Fertilizer 2-12-4 (2401)	2.00	2.00	12.01	12.00	3.83	4.00	---
Davco Fertilizer 2-12-6 (1783)	2.23	2.00	12.02	12.00	6.13	6.00	---
Davco Fertilizer 2-12-6 (1985)	2.07	2.00	12.41	12.00	6.82	6.00	---
Davco Fertilizer 2-12-6 (2400)	2.02	2.00	*11.90	12.00	6.08	6.00	---
Davco Fertilizer 2-12-6 (2545)	2.26	2.00	11.89	12.00	7.21	6.00	---
Davco Fertilizer 2-12-6 (2598)	2.28	2.00	12.20	12.00	6.52	6.00	---

\*Leficient

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		As Muriate P. ct.
	Found	Guar.	Found	Guar.	Found	Guar.	
Davco Fertilizer 2-12-6 (2608)	2.14	2.00	12.11	12.00	6.53	6.00	----
Davco Fertilizer 3-12-6 (1435)	3.01	3.00	12.59	12.00	6.15	6.00	----
Davco Fertilizer 3-12-6 (1782)	3.02	3.00	12.06	12.00	6.08	6.00	----
Davco Fertilizer 3-12-6 (2217)	3.12	3.00	11.74	12.00	6.13	6.00	----
Davco Fertilizer 4-8-7 (1787)	4.01	4.00	8.30	8.00	7.17	7.00	----
Davco Fertilizer 4-8-7 (1830)	4.06	4.00	8.24	8.00	7.02	7.00	----
Davco Fertilizer 4-8-7 (1647)	4.20	4.00	8.34	8.00	7.87	7.00	----
Davco Fertilizer 4-8-7 (2150)	4.08	4.00	8.00	8.00	7.48	7.00	----
Davco Fertilizer 4-8-7 (2212)	4.26	4.00	8.50	8.00	7.29	7.00	----
Davco Fertilizer 4-8-7 (2218)	4.27	4.00	8.23	8.00	6.91	7.00	----
Davco Fertilizer 4-8-7 (2226)	4.17	4.00	8.62	8.00	7.49	7.00	----
Davco Fertilizer 4-8-7 (2267)	4.30	4.00	8.64	8.00	7.36	7.00	----
Davco Fertilizer 4-8-7 (2325)	4.05	4.00	8.27	8.00	6.98	7.00	----
Davco Fertilizer 4-8-7 (2325)	4.16	4.00	8.29	8.00	10.09	10.00	----
Davco Fertilizer 4-8-10 (1761)	4.01	4.00	8.47	8.00	10.66	10.00	----
Davco Fertilizer 4-8-10 (1793)	4.31	4.00	12.11	12.00	4.29	4.00	----
Davco Fertilizer 4-12-4 (1785)	4.26	4.00	12.01	12.00	4.62	4.00	----
Davco Fertilizer 4-12-4 (2214)	4.29	4.00	12.61	12.00	4.21	4.00	----
Davco Fertilizer 4-12-4 (2224)	4.27	4.00	12.79	12.00	4.28	4.00	----
Davco Fertilizer 4-12-4 (2324)	4.29	4.00	12.92	12.00	4.25	4.00	----
Davco Fertilizer 4-12-4 (2596)	4.14	4.00	16.13	16.00	4.40	4.00	----
Davco Fertilizer 4-16-4 (1788)	4.27	4.00	16.10	16.00	4.31	4.00	----
Davco Fertilizer 5-10-5 (2404)	5.02	5.00	10.20	10.00	5.36	5.00	----
Davco Fertilizer 5-10-5 (1429)	5.01	5.00	10.32	10.00	5.08	5.00	----
Davco Fertilizer 5-10-5 (1445)	4.80	5.00	10.07	10.00	5.05	5.00	----
Davco Fertilizer 5-10-5 (1859)	3.30	5.00	8.62	10.00	10.20	5.00	----
Davco Fertilizer 5-10-5 (2093)	6.06	6.00	6.32	6.00	5.23	5.00	----
Davco Fertilizer 6-6-5 (1760)	8.02	8.00	16.20	16.00	13.83	14.00	----
Davco Fertilizer 8-16-14 (1942)	2.29	2.00	8.40	8.00	*9.73	10.00	----
Davco Homogeneous Granulated Fertilizer 2-8-10 (1443)	2.00	2.00	8.07	8.00	10.14	10.00	----
Davco Homogeneous Granulated Fertilizer 2-8-10 (1794)	1.90	2.00	7.89	8.00	10.00	10.00	----
Davco Homogeneous Granulated Fertilizer 2-8-10 (2362)	2.27	2.00	9.36	9.00	5.04	5.00	----
Davco Homogeneous Granulated Fertilizer 2-9-5 (1446)	2.35	2.00	9.18	9.00	5.48	5.00	----
Davco Homogeneous Granulated Fertilizer 2-9-5 (1797)	2.31	2.00	9.13	9.00	5.45	5.00	----
Davco Homogeneous Granulated Fertilizer 2-9-5 (2366)	2.31	2.00	9.25	9.00	4.95	5.00	----
Davco Homogeneous Granulated Fertilizer 2-9-5 (2607)	2.30	2.00	12.44	12.00	4.21	4.00	----
Davco Homogeneous Granulated Fertilizer 2-12-4 (1447)	1.91	2.00	11.90	12.00	4.01	4.00	----
Davco Homogeneous Granulated Fertilizer 2-12-4 (1511)	1.90	2.00	12.38	12.00	4.15	4.00	----
Davco Homogeneous Granulated Fertilizer 2-12-4 (1796)	2.30	2.00	11.93	12.00	4.25	4.00	----
Davco Homogeneous Granulated Fertilizer 2-12-4 (2524)	2.21	2.00	12.27	12.00	5.81	6.00	----
Davco Homogeneous Granulated Fertilizer 2-12-4 (1448)	2.08	2.00	*11.77	12.00	6.35	6.00	----
Davco Homogeneous Granulated Fertilizer 5-10-5 (2366)	3.03	3.00	12.32	12.00	6.80	6.00	----
Davco Homogeneous Granulated Fertilizer 3-12-6 (1451)	2.86	3.00	12.08	12.00	6.48	6.00	----
Davco Homogeneous Granulated Fertilizer 3-12-6 (1791)	3.02	3.00	12.10	12.00	6.13	6.00	----
Davco Homogeneous Granulated Fertilizer 3-12-6 (2363)	3.31	3.00	12.30	12.00	6.04	6.00	----
Davco Homogeneous Granulated Fertilizer 3-12-6 (2417)	3.10	3.00	12.14	12.00	5.87	6.00	----
Davco Homogeneous Granulated Fertilizer 3-12-6 (2522)	*3.65	4.00	8.34	8.00	7.63	7.00	----
Davco Homogeneous Granulated Fertilizer 4-6-7 (1440)	4.02	4.00	8.20	8.00	7.25	7.00	----
Davco Homogeneous Granulated Fertilizer 4-8-7 (1795)	4.01	4.00	8.39	8.00	7.08	7.00	----
Devco Homogeneous Granulated Fertilizer 4-8-7 (2418)	3.75	4.00	8.05	8.00	6.86	7.00	----
Devco Homogeneous Granulated Fertilizer 4-8-7 (2523)	4.71	5.00	10.34	10.00	5.22	5.00	----
Davco Homogeneous Granulated Fertilizer 5-10-5 (1512)	4.94	5.00	10.33	10.00	5.04	5.00	----
Davco Homogeneous Granulated Fertilizer 5-10-5 (2152)	*9.74	10.00	6.02	6.00	4.56	4.00	----
Davco Homogeneous Granulated Fertilizer 10-6-4 (1404)	*9.57	10.00	6.49	6.00	4.09	4.00	----
Davco Homogeneous Granulated Fertilizer 10-6-4 (1442)	9.82	10.00	6.10	6.00	4.28	4.00	----
Davco Pomo Food 10-6-4 (2147)	*9.65	10.00	6.09	6.00	4.15	4.00	----
Davco Super Fish 2-12-6 (1436)	2.04	2.00	12.46	12.00	6.77	6.00	----
Davco Super Fish 2-12-6 (1784)	2.12	2.00	12.40	12.00	6.74	6.00	----
Davco Tomato Food 4-12-6 (2094)	4.30	4.00	*11.64	12.00	6.60	6.00	----
Davco Tomato Food 4-12-6 (2140)	4.22	4.00	12.53	12.00	6.13	6.00	----
Gipe's 2-8-10 (1427)	2.13	2.00	8.00	6.00	10.21	10.00	----
Gipe's 2-9-5 (1428)	2.27	2.00	9.05	9.00	6.05	5.00	----
Gipe's 2-12-6 (1426)	2.21	2.00	12.55	12.00	6.26	6.00	----
Gipe's 4-8-7 (1425)	4.07	4.00	8.14	8.00	7.31	7.00	----
Gro-All 4-12-4 (1789)	4.28	4.00	12.49	12.00	4.02	4.00	----
Gro-All 4-12-4 (1991)	4.22	4.00	12.15	12.00	4.56	4.00	----
Gro-All Crown Jewel 1-10-5 (1988)	2.17	1.00	9.84	10.00	4.97	5.00	----
Gro-All Excelsior 2-9-5 (1449)	2.25	2.00	9.39	9.00	5.24	5.00	----
Gro-All Excelsior 2-9-5 (1788)	2.30	2.00	9.26	9.00	5.11	5.00	----
Gro-All Golden Sheep 3-12-6 (1934)	2.93	3.00	12.27	12.00	6.87	6.00	----
Gro-All Grain Food 2-12-6 (1673)	2.28	2.00	12.34	12.00	4.01	4.00	----
Gro-All Grain Food 2-12-4 (1585)	2.22	2.00	12.42	12.00	3.98	4.00	----
Gro-All Grain Food 2-12-4 (1983)	2.29	2.00	12.00	12.00	4.59	4.00	----
Gro-All Imperial 2-8-10 (1989)	2.31	2.00	8.35	8.00	10.63	10.00	----
Gro-All Potato Special 4-8-7 (1856)	4.02	4.00	8.22	8.00	7.80	7.00	----
Gro-All Potato Special 4-8-7 (1990)	4.00	4.00	8.06	8.00	*5.74	7.00	----
Gro-All Potato Special 4-8-7 (2030)	4.13	4.00	8.00	8.00	7.33	7.00	----

\*Deficient

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	NITROGEN				AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate		
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.		
Hubbard Fertilizer 2-12-4 (1407)	2.11	2.00	12.32	12.00	4.91	4.00			
Hubbard Fertilizer 2-12-4 (1847)	2.31	2.00	12.03	12.00	4.44	4.00			
Hubbard Fertilizer 2-12-4 (2548)	2.02	2.00	12.53	12.00	4.46	4.00			
Hubbard Jersey Trucker 2-8-10 (1403)	2.13	2.00	8.30	8.00	10.16	10.00			
Hubbard Jersey Trucker 2-8-10 (1548)	2.15	2.00	8.22	8.00	10.43	10.00			
Hubbard Jersey Trucker 2-8-10 (2546)	2.13	2.00	8.05	8.00	10.31	10.00			
Hubbard Money Maker 2-9-5 (1402)	2.24	2.00	9.09	9.00	5.44	5.00			
Hubbard Money Maker 2-9-5 (1550)	2.11	2.00	9.45	9.00	5.14	5.00			
Hubbard Money Maker 2-9-5 (2229)	2.03	2.00	8.82	9.00	5.00	5.00			
Hubbard Potato 4-8-7 (1549)	4.00	4.00	8.32	8.00	7.41	7.00			
Hubbard Potato 4-8-7 (2232)	4.23	4.00	8.39	8.00	7.37	7.00			
Hubbard Special Grand 4-12-4 (2231)	4.29	4.00	12.03	12.00	4.28	4.00			
Miller Fertilizer 2-8-10 (1431)	2.27	2.00	8.28	8.00	9.81	10.00			
Miller Fertilizer 2-8-10 (2095)	2.04	2.00	8.08	8.00	8.46	10.00			
Miller Fertilizer 2-9-5 (1672)	2.24	2.00	9.01	9.00	5.27	5.00			
Miller Fertilizer 2-9-5 (1945)	2.11	2.00	*8.78	9.00	4.96	5.00			
Miller Fertilizer 2-9-5 (2216)	2.30	2.00	9.04	9.00	5.39	5.00			
Miller Fertilizer 2-12-4 (1434)	2.26	2.00	12.31	12.00	4.35	4.00			
Miller Fertilizer 2-12-6 (1439)	2.20	2.00	12.28	12.00	6.20	6.00			
Miller Fertilizer 3-12-6 (1433)	3.24	3.00	12.17	12.00	6.39	6.00			
Miller Fertilizer 4-8-7 (1430)	4.15	4.00	8.33	8.00	7.19	7.00			
Miller Fertilizer 4-8-7 (1757)	4.22	4.00	8.44	8.00	6.85	7.00			
Miller Fertilizer 4-8-7 (2096)	4.05	4.00	7.95	8.00	6.89	7.00			
Obere 3-5-12 Tobacco Fertilizer (2138)	2.90	3.00	5.54	5.00	13.33	12.00			
Obere 4-8-5 Tobacco Fertilizer (2139)	4.02	4.00	8.26	8.00	5.64	5.00			
EASTERN STATES FARMERS EXCHANGE, Springfield, Mass.									
Eastern States 2-8-10 (1491)	2.31	2.00	8.14	8.00	11.09	10.00			
Eastern States 2-8-10 (1686)	2.30	2.00	8.30	8.00	10.56	10.00			
Eastern States 2-8-10 (2425)	2.50	2.00	8.64	8.00	11.48	10.00			
Eastern States 2-12-6 (1492)	2.29	2.00	12.25	12.00	6.92	6.00			
Eastern States 2-12-6 (1690)	2.27	2.00	13.23	12.00	7.41	6.00			
Eastern States 2-12-6 (2428)	2.50	2.00	12.70	12.00	6.38	6.00			
Eastern States 4-8-8 (1489)	4.37	4.00	8.04	8.00	9.47	8.00			
Eastern States 4-8-8 (1684)	4.31	4.00	8.29	8.00	9.45	8.00			
Eastern States 4-8-8 (1935)	5.01	4.00	9.39	8.00	10.51	8.00			
Eastern States 4-12-4 (1490)	4.51	4.00	12.32	12.00	5.06	4.00			
Eastern States 4-12-4 (1692)	4.57	4.00	12.08	12.00	4.86	4.00			
Eastern States 4-16-20 (1683)	4.29	4.00	16.04	16.00	21.68	20.00			
Eastern States 4-16-20 (1934)	4.31	4.00	17.14	16.00	22.34	20.00			
Eastern States 4-16-20 (2430)	4.60	4.00	17.85	16.00	21.34	20.00			
Eastern States 4-24-12 (1487)	4.51	4.00	24.54	24.00	13.78	12.00			
Eastern States 4-24-12 (1682)	4.72	4.00	24.00	24.00	15.46	12.00			
Eastern States 4-24-12 (1936)	4.37	4.00	24.14	24.00	13.35	12.00			
Eastern States 4-24-12 (2429)	4.68	4.00	23.86	24.00	14.92	12.00			
Eastern States 8-16-16 (1486)	8.06	8.00	16.92	16.00	15.54	16.00			
Eastern States 8-16-16 (1681)	8.13	8.00	16.56	16.00	17.09	16.00			
Eastern States 8-16-16 (1938)	8.89	8.00	13.06	16.00	*14.66	16.00			
Eastern States 8-16-16 (2633)	*7.64	8.00	15.04	16.00	18.78	16.00			
Eastern States 8-16-16 (2848)	8.29	8.00	*15.64	16.00	18.26	16.00			
Eastern States 8-24-8 (1488)	7.98	8.00	24.48	24.00	9.37	8.00			
Eastern States 8-24-8 (1679)	8.01	8.00	*23.31	24.00	9.94	8.00			
Eastern States 8-24-8 (1939)	8.01	8.00	*23.49	24.00	9.19	8.00			
AMOS EBY & COMPANY Leaman Place, Pa.									
Eby Challenge 4-8-7 (2126)	4.00	4.00	8.28	8.00	*6.60	7.00			
Eby Grase Special 7-6-5 (2125)	7.02	7.00	6.23	6.00	5.03	5.00			
Eby Peque Ammoniated 1-10-5 (2121)	1.01	1.00	10.31	10.00	5.49	5.00			
Eby Peque Economy 2-10-4 (2120)	2.06	2.00	10.40	10.00	4.84	4.00			
Eby Peque High Grade 5-5-5 (2122)	5.01	5.00	6.02	6.00	6.28	5.00			
Eby Peque Special Potato 3-8-7 (2123)	*2.76	3.00	8.27	8.00	7.61	7.00			
FARMERS FERTILIZER WORKS, Elizabethtown, Pa.									
Farmers Best Yet 2-8-10 (1462)	2.28	2.00	8.14	8.00	10.05	10.00			
Farmers Best Yet 2-8-10 (2334)	2.15	2.00	8.04	8.00	10.09	10.00			
Farmers Club 3-8-5 (2338)	3.23	3.00	9.44	8.00	4.96	5.00			
Farmers General Tobacco 3-5-12 (1463)	3.28	3.00	5.68	5.00	12.58	12.00			
Farmers Gilt Edge Potato and Truck Fertilizer 4-8-7 (1762)	4.01	4.00	9.34	8.00	7.03	7.00			
Farmers I.X.L. 2-12-4 (1763)	2.31	2.00	12.22	12.00	4.71	4.00			
Farmers I.X.L. 2-12-4 (2339)	2.30	2.00	12.42	12.00	4.75	4.00			
Farmers I.X.L. 2-12-4 (2497)	2.30	2.00	12.15	12.00	4.44	4.00			
Farmers Tobacco Special 5-5-6 (1461)	5.03	5.00	5.72	5.00	7.16	6.00			
Farmers 1-10-3 (1464)	1.30	1.00	10.27	10.00	5.76	5.00			
Farmers 1-10-6 (1764)	1.29	1.00	10.44	10.00	5.88	5.00			
Farmers 1-10-5 (2340)	1.26	1.00	10.49	10.00	5.60	5.00			
Farmers 1-10-5 (2498)	1.52	1.00	10.26	10.00	5.55	5.00			
Farmers 2-9-5 (2335)	2.31	2.00	9.31	9.00	7.32	5.00			
Farmers 2-9-5 (2499)	2.01	2.00	9.28	9.00	5.13	5.00			
Farmers 3-12-5 (2332)	3.04	3.00	12.29	12.00	5.52	5.00			
Farmers 3-12-5 (2496)	3.11	3.00	12.29	12.00	5.66	5.00			
GIPER FERTILIZER WORKS, Lebanon, Pa.									
Gipe's 2-8-10 (2359)	2.07	2.00	8.19	8.00	10.13	10.00			
Gipe's 2-9-5 (2357)	2.14	2.00	9.22	9.00	5.52	5.00			
Gipe's 2-12-4 (2360)	2.62	2.00	12.21	12.00	4.57	4.00			
Gipe's 2-12-6 (2358)	2.20	2.00	12.25	12.00	6.44	6.00			
Gipe's 3-12-6 (2364)	3.08	3.00	12.08	12.00	6.33	6.00			
GRIFFITH & ROYD CO., Baltimore, Md.									
Excelsior Guano 4-12-4 (1892)	4.29	4.00	*11.75	12.00	4.61	4.00			
Excelsior Guano 4-12-4 (2242)	3.21	4.00	12.42	12.00	4.73	4.00			
Extra Strength Guano 4-15-4 (2407)	4.03	4.00	16.26	16.00	4.50	4.00			
Extra Strength Guano 4-16-4 (2410)	4.29	4.00	15.22	15.00	4.89	4.00			

\*Deficient

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
Fish and Potash Guano 2-10-4 (2594)	2.21	2.00	10.00	10.00	4.79	4.00	---
Gilt Edge Crop Guano 2-8-10 (1354)	2.03	2.00	8.73	8.00	10.50	10.00	---
Gilt Edge Crop Guano 2-8-10 (1867)	2.01	2.00	8.17	8.00	10.62	10.00	---
Gilt Edge Crop Guano 2-8-10 (2015)	2.02	2.00	8.03	8.00	10.08	10.00	---
High Grade Economizer 2-12-6 (1353)	2.22	2.00	12.45	12.00	6.01	6.00	---
High Grade Economizer 2-12-6 (2508)	2.07	2.00	12.26	12.00	6.47	6.00	---
High Grade Truck Guano 4-8-7 (1396)	3.95	4.00	8.56	8.00	7.86	7.00	---
High Grade Truck Guano 4-8-7 (1894)	4.01	4.00	8.52	8.00	7.57	7.00	---
High Grade Truck Guano 4-8-7 (2013)	4.10	4.00	8.23	8.00	8.05	7.00	---
High Grade Vegetable Grower 3-8-10 (1891)	3.25	3.00	8.45	8.00	9.93	10.00	---
Nitro Crop Feeder 9-6-2 (2248)	9.61	9.00	5.50	5.00	2.31	2.00	---
Peerless Fertilizer 1-10-6 (1394)	1.01	1.00	10.07	10.00	5.90	5.00	---
Peerless Fertilizer 1-10-6 (2408)	1.12	1.00	10.02	10.00	5.00	5.00	---
Peerless Fertilizer 1-10-6 (2595)	1.03	1.00	10.18	10.00	4.91	5.00	---
Reliable Crop Grower 2-12-4 (1893)	2.17	2.00	12.69	12.00	4.03	4.00	---
Reliable Crop Grower 2-12-4 (2017)	2.16	2.00	12.33	12.00	4.54	4.00	---
Reliable Crop Grower 2-12-4 (2243)	2.08	2.00	12.35	12.00	4.96	4.00	---
Reliable Crop Grower 2-12-4 (2292)	2.01	2.00	12.50	12.00	4.42	4.00	---
Special Guano 2-9-5 (1355)	2.26	2.00	9.43	9.00	5.12	5.00	---
Special Guano 2-9-5 (2246)	2.01	2.00	9.58	9.00	5.08	5.00	---
Special Guano 2-9-5 (2291)	2.08	2.00	9.53	9.00	5.45	5.00	---
Special Guano 2-9-5 (2307)	2.03	2.00	9.50	9.00	5.04	5.00	---
Special Guano 2-9-5 (2409)	2.09	2.00	9.33	9.00	5.35	5.00	---
Special Guano 2-9-5 (2509)	2.00	2.00	9.04	9.00	5.15	5.00	---
Special Potato Fertilizer 3-8-8 (1356)	3.16	3.00	8.30	8.00	8.02	8.00	---
Special Potato Fertilizer 3-8-8 (1890)	3.20	3.00	8.47	8.00	8.43	8.00	---
Special Potato Fertilizer 3-8-8 (2016)	3.01	3.00	8.56	8.00	8.37	8.00	---
Planter's Pride 3-12-6 (2014)	3.12	3.00	12.26	12.00	6.14	6.00	---
INDEPENDENT MANUFACTURING CO.							
Philadelphia, Pa.							
Independent Consumer 2-8-10 (2281)	2.01	2.00	8.43	8.00	11.09	10.00	---
Independent Consumer 2-9-5 (2282)	2.29	2.00	9.17	9.00	5.74	5.00	---
Independent Consumer 2-9-5 (2631)	2.28	2.00	9.20	9.00	5.81	5.00	---
Independent Consumer 4-8-7 (2284)	4.20	4.00	8.24	8.00	8.04	7.00	---
Independent Consumer 6-8-7 (1717)	5.01	5.00	8.25	8.00	6.98	7.00	---
Independent Standard 3-10-10 (2285)	3.26	3.00	10.07	10.00	10.45	10.00	---
Independent Standard 4-10-3 (2287)	*3.68	4.00	*9.75	10.00	4.00	3.00	---
Independent Standard 5-8-7 (2280)	5.58	5.00	8.52	8.00	*6.50	7.00	---
Independent Standard 6-8-5 (2043)	6.29	6.00	8.16	8.00	5.04	5.00	---
Independent Standard Matchless Market							
Gardener 4-8-7 (2283)	4.02	4.00	8.02	8.00	7.37	7.00	---
Independent Standard Special Wheat Fertilizer 2-12-5 (2286)	2.50	2.00	12.07	12.00	5.08	5.00	---
INTERNATIONAL AGRICULTURAL CORPORATION, Buffalo, N. Y.							
International General Crop 2-12-4 (2164)	2.06	2.00	12.00	12.00	4.28	4.00	---
International Superior 4-12-4 (2047)	4.20	4.00	12.04	12.00	4.26	4.00	---
International Supreme 2-8-10 (2046)	2.02	2.00	8.00	8.00	10.24	10.00	---
KOLLER FERTILIZER CO., Glen Rock, Pa.							
Koller's Corn Special Phosphate 2-12-4 (1978)	1.85	2.00	11.86	12.00	5.85	4.00	---
Koller's Keystone Potato Fertilizer 4-8-7 (1976)	4.16	4.00	8.16	8.00	7.16	7.00	---
Koller's Producer Phosphate 2-8-10 (1980)	2.16	2.00	8.09	8.00	10.34	10.00	---
Koller's Super Ammoniated Phosphate 2-9-6 (1977)	2.01	2.00	*8.70	9.00	5.21	5.00	---
Koller's Truck and Garden Phosphate 3-8-5 (1979)	3.01	3.00	8.16	8.00	5.49	4.00	---
Hooker's Formula 4-10-4 (1981)	4.31	4.00	10.17	10.00	4.85	4.00	---
LANCASTER SONE FERTILIZER CO., INC., Quarryville, Pa.							
Conestoga Fish Compound 2-10-5 (1472)	2.01	2.00	10.24	10.00	6.03	5.00	---
Conestoga Harvest Queen 2-9-5 (1468)	2.18	2.00	9.38	9.00	5.03	5.00	---
Conestoga Lancaster Peerless 2-12-4 (1469)	2.02	2.00	12.16	12.00	4.63	4.00	---
Conestoga Truckers Special 4-8-7 (1470)	4.03	4.00	8.30	8.00	7.30	7.00	---
Conestoga 2-8-10 (1467)	2.26	2.00	8.48	8.00	10.04	10.00	---
Conestoga 3-12-5 (1471)	3.04	3.00	12.36	12.00	5.00	5.00	---
LEGANON FERTILIZER WORKS, Lebanon, Pa.							
Levan's 1-10-5 (2113)	1.10	1.00	10.03	10.00	5.28	5.00	---
Levan's 1-10-5 (2349)	1.19	1.00	10.22	10.00	5.39	5.00	---
Levan's 2-8-10 (1744)	2.11	2.00	8.30	8.00	10.73	10.00	---
Levan's 2-8-10 (2116)	2.12	2.00	8.00	8.00	10.24	10.00	---
Levan's 2-8-10 (2353)	2.04	2.00	8.34	8.00	10.09	10.00	---
Levan's 2-9-5 (2117)	2.14	2.00	9.25	9.00	5.53	5.00	---
Levan's 2-9-5 (2350)	2.08	2.00	9.13	9.00	5.13	5.00	---
Levan's 2-12-4 (2115)	2.11	2.00	12.18	12.00	4.33	4.00	---
Levan's 2-12-4 (2351)	2.14	2.00	12.00	12.00	4.37	4.00	---
Levan's 2-12-6 (1741)	2.13	2.00	12.14	12.00	6.54	6.00	---
Levan's 2-12-6 (2112)	2.15	2.00	12.30	12.00	6.14	6.00	---
Levan's 2-12-6 (2348)	2.07	2.00	12.23	12.00	6.07	6.00	---
Levan's 3-12-6 (1746)	3.22	3.00	12.37	12.00	6.40	6.00	---
Levan's 3-12-6 (2111)	3.14	3.00	12.13	12.00	6.41	6.00	---
Levan's 3-12-6 (2346)	3.16	3.00	12.23	12.00	6.36	6.00	---
Levan's 4-8-7 (1740)	4.01	4.00	8.13	8.00	7.04	7.00	---
Levan's 4-8-7 (2110)	4.19	4.00	8.49	8.00	7.40	7.00	---
Levan's 4-8-7 (2352)	4.17	4.00	8.02	8.00	7.14	7.00	---
Levan's 4-16-4 (2105)	4.23	4.00	16.42	16.00	4.27	4.00	---
Levan's 4-16-4 (2341)	4.72	4.00	16.30	16.00	4.42	4.00	---
Levan's 4-16-10 (1743)	4.20	4.00	16.04	16.00	10.32	10.00	---
Levan's 4-16-10 (2106)	4.02	4.00	16.64	16.00	*9.75	10.00	---
Levan's 4-16-10 (2344)	4.28	4.00	16.12	16.00	10.07	10.00	---
Levan's 5-10-5 (1742)	5.02	5.00	10.40	10.00	5.12	6.00	---

\*Deficient

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
Levan's 5-10-5 (2114)	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
Levan's 5-10-5 (2342)	5.21	5.00	10.00	10.00	6.40	5.00	---
MILLER FERTILIZER CO., Baltimore, Md.	5.12	5.00	10.17	10.00	5.30	5.00	---
Miller Fertilizer 2-8-10 (1632)	2.11	2.00	8.28	8.00	12.29	10.00	---
Miller Fertilizer 2-9-5 (1629)	2.05	2.00	9.21	9.00	5.45	5.00	---
Miller Fertilizer 2-12-4 (1630)	2.09	2.00	*11.16	12.00	5.27	4.00	---
Miller Fertilizer 4-8-7 (1631)	4.16	4.00	8.38	8.00	7.83	7.00	---
MILLER CHEMICAL & FERTILIZER CORP. Baltimore, Md.							
Richield 2-12-4 (2411)	1.93	2.00	12.28	12.00	4.31	4.00	---
MYERSTOWN FERTILIZER WORKS, INC. Myerstown, Pa.							
Corn and Potato Grower 4-8-5 (1454)	*2.24	4.00	10.89	8.00	*3.97	5.00	---
Corn and Potato Grower 4-8-7 (1453)	*2.05	4.00	10.46	8.00	*6.47	7.00	---
Farmer's Special 3-10-3 (1452)	*2.47	3.00	10.30	10.00	4.22	3.00	---
PENNSYLVANIA FARM BUREAU COOP. ASS'N., INC., Harrisburg, Pa.							
Farm Bureau 2-8-10 (1502)	2.01	2.00	8.49	8.00	*9.66	10.00	---
Farm Bureau 2-8-10 (1874)	1.92	2.00	8.08	8.00	10.22	10.00	---
Farm Bureau 2-8-10 (2397)	1.90	2.00	8.08	8.00	11.78	10.00	---
Farm Bureau 2-8-10 (2584)	1.93	2.00	8.42	8.00	10.62	10.00	---
Farm Bureau 2-9-5 (1504)	2.13	2.00	9.36	9.00	5.39	5.00	---
Farm Bureau 2-9-5 (1993)	2.14	2.00	9.22	9.00	5.12	5.00	---
Farm Bureau 2-9-5 (2141)	2.29	2.00	9.16	9.00	4.97	5.00	---
Farm Bureau 2-9-5 (2396)	2.03	2.00	9.07	9.00	5.43	5.00	---
Farm Bureau 2-9-5 (2583)	2.09	2.00	9.15	9.00	5.62	5.00	---
Farm Bureau 2-12-6 (1500)	2.16	2.00	12.18	12.00	6.45	6.00	---
Farm Bureau 2-12-6 (2142)	2.13	2.00	12.10	12.00	6.74	6.00	---
Farm Bureau 2-12-6 (2399)	2.01	2.00	12.33	12.00	6.50	6.00	---
Farm Bureau 2-12-6 (2582)	2.15	2.00	12.98	12.00	5.84	6.00	---
Farm Bureau 3-12-6 (1411)	3.14	3.00	12.07	12.00	6.44	6.00	---
Farm Bureau 4-8-7 (1412)	4.00	4.00	8.14	8.00	7.21	7.00	---
Farm Bureau 4-8-7 (1501)	4.01	4.00	8.02	8.00	7.21	7.00	---
Farm Bureau 4-8-7 (1873)	4.00	4.00	8.35	8.00	7.86	7.00	---
Farm Bureau 4-8-7 (1992)	4.01	4.00	8.16	8.00	6.96	7.00	---
Farm Bureau 4-16-4 (2398)	4.01	4.00	16.44	16.00	4.49	4.00	---
Farm Bureau 4-18-16 (1605)	4.24	4.00	18.02	18.00	9.95	10.00	---
Farm Bureau 8-16-14 (1410)	8.22	8.00	17.30	16.00	14.99	14.00	---
Farm Bureau 10-6-4 (1994)	*9.12	10.00	6.16	6.00	4.35	4.00	---
RASIN-MONUMENTAL CO., Baltimore, Md.							
Resin's Comet Crain and Grass Grower 2-12-4 (1386)	2.14	2.00	12.29	12.00	4.40	4.00	---
Resin's National Crop Compound 1-10-5 (1387)	1.09	1.00	10.14	10.00	5.53	5.00	---
Resin's Royal Fish and Potash Mixture 2-9-5 (1388)	1.90	2.00	9.36	9.00	5.32	5.00	---
Resin's Royal Fish and Potash Mixture 2-9-5 (2034)	2.01	2.00	9.44	9.00	5.34	5.00	---
Resin's Royal Fish and Potash Mixture 2-9-5 (2450)	2.14	2.00	9.65	9.00	5.36	5.00	---
Resin's Special for Potatoes and Vegetables 2-8-10. (1382)	2.00	2.00	8.96	8.00	10.65	10.00	---
Resin's Special for Potatoes and Vegetables 2-8-10 (2451)	2.17	2.00	9.28	8.00	10.57	10.00	---
READING SONE FERTILIZER CO. Reading, Pa.							
Reading All Crop Special 2-10-6 (2651)	2.10	2.00	10.54	10.00	6.04	6.00	---
Reading 2-8-10 (1482)	2.01	2.00	8.16	8.00	10.10	10.00	---
Reading 2-8-10 (2377)	2.01	2.00	8.35	8.00	8.18	10.00	---
Reading 2-9-5 (1483)	2.01	2.00	9.07	9.00	5.13	5.00	---
Reading 2-9-5 (1582)	2.00	2.00	10.10	9.00	5.21	5.00	---
Reading 2-9-5 (2375)	2.02	2.00	9.31	9.00	5.41	5.00	---
Reading 2-12-5 (1584)	2.10	2.00	12.14	12.00	5.37	5.00	---
Reading 2-12-5 (2376)	2.06	2.00	12.9C	12.00	5.19	5.00	---
Reading 3-12-5 (1585)	3.16	3.00	12.16	12.00	5.69	5.00	---
Reading 3-12-5 (2373)	3.12	3.00	12.14	12.00	4.81	5.00	---
Reading 4-8-7 (1581)	3.85	4.00	8.09	8.00	7.96	7.00	---
ROBERT A. REICHRARD, INC., Allentown, Pa.							
Reichard's Animal Ease 2-9-5 (2186)	2.03	2.00	9.18	9.00	5.36	5.00	---
Reichard's Animal Ease 2-9-5 (2668)	2.01	2.00	9.08	9.00	5.03	5.00	---
Reichard's Animal Ease 3-10-6 (2171)	3.22	3.00	9.91	10.00	6.31	6.00	---
Reichard's Animal Ease 4-8-8 (2185)	4.01	4.00	8.04	8.00	8.02	8.00	---
F. S. ROYSTER CUANO CO., Baltimore, Md.							
Royster Sanner Guano 2-8-10 (1541)	2.17	2.00	8.35	8.00	11.17	10.00	---
Royster's Banner Guano 2-8-10 (1560)	1.98	2.00	8.06	8.00	10.44	10.00	---
Royster's Banner Cuano 2-8-10 (1619)	2.02	2.00	8.08	8.00	10.02	10.00	---
Royster's Banner Guano 2-8-10 (1773)	2.01	2.00	8.30	8.00	9.94	10.00	---
Royster's Banner Guano 2-8-10 (1820)	1.84	2.00	8.49	8.00	10.12	10.00	---
Royster's Banner Guano 2-8-10 (1915)	2.06	2.00	8.48	8.00	12.04	10.00	---
Royster's Banner Guano 2-8-10 (2074)	1.86	2.00	8.16	8.00	11.27	10.00	---
Royster's Banner Guano 2-8-10 (214B)	2.18	2.00	8.36	8.00	9.90	10.00	---
Royster's Big Bully Guano 2-9-5 (1315)	2.03	2.00	9.12	9.00	6.02	5.00	---
Royster's Big Bully Guano 2-9-5 (1370)	2.01	2.00	9.51	9.00	4.87	5.00	---
Royster's Big Bully Guano 2-9-5 (1540)	2.30	2.00	9.33	9.00	5.43	5.00	---
Royster's Big Bully Cuano 2-9-5 (1620)	2.01	2.00	9.06	9.00	5.01	5.00	---
Royster's Big Bully Guano 2-9-5 (1772)	2.05	2.00	9.16	9.00	5.32	5.00	---
Royster's Big Bully Guano 2-9-5 (1909)	2.05	2.00	9.61	9.00	5.23	5.00	---
Royster's Big Bully Guano 2-9-5 (1997)	2.10	2.00	9.33	9.00	5.17	5.00	---
Royster's Big Bully Guano 2-9-5 (2073)	2.02	2.00	9.04	9.00	5.05	5.00	---
Royster's Big Bully Guano 2-9-5 (2188)	1.95	2.00	9.10	9.00	5.26	5.00	---
Royster's Big Bully Guano 2-9-5 (2449)	2.01	2.00	9.80	9.00	5.25	5.00	---
Royster's Big Bully Cuano 2-9-5 (2463)	2.01	2.00	9.05	9.00	5.79	5.00	---

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MANUFACTURER AND BRAND NAME	NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate P. ct.
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	—
Royster's Big Bully Guano 2-9-5 (2599)	2.04	2.00	9.34	9.00	6.69	5.00	—
Royster's Big Bully Guano 2-9-5 (2605)	2.01	2.00	9.68	9.00	6.44	5.00	—
Royster's Big Bully Guano 2-9-5 (2624)	2.01	2.00	9.62	8.00	5.83	5.00	—
Royster's Curlew Guano 3-12-6 (1317)	3.08	3.00	12.44	12.00	6.02	6.00	—
Royster's Curlew Guano 3-12-6 (1618)	2.97	3.00	12.32	12.00	6.42	6.00	—
Royster's Curlew Guano 3-12-6 (1916)	3.02	3.00	12.30	12.00	6.09	6.00	—
Royster's Curlew Guano 3-12-6 (2157)	3.13	3.00	12.66	12.00	6.22	6.00	—
Royster's Curlew Guano 3-12-6 (2448)	3.15	3.00	12.51	12.00	6.09	6.00	—
Royster's Curlew Guano 3-12-6 (2462)	3.19	3.00	12.77	12.00	6.26	6.00	—
Royster's Curlew Guano 3-12-6 (2599)	3.31	3.00	12.70	12.00	6.39	6.00	—
Royster's Curlew Guano 3-12-6 (2624)	3.19	3.00	12.77	12.00	6.25	5.00	—
Royster's Fonda Guano 5-10-5 (1621)	5.18	5.00	10.24	10.00	5.19	5.00	—
Royster's Fonda Guano 5-10-5 (2072)	5.19	5.00	10.15	10.00	5.21	5.00	—
Royster's Fonda Guano 5-10-5 (2144)	5.21	5.00	10.12	10.00	5.16	6.00	—
Royster's Fonda Guano 5-10-5 (2277)	5.04	5.00	10.43	10.00	5.69	4.00	—
Royster's Gem Guano 2-12-4 (1318)	2.23	2.00	12.11	12.00	4.27	4.00	—
Royster's Gem Guano 2-12-4 (1369)	2.23	2.00	12.45	12.00	4.22	4.00	—
Royster's Gem Guano 2-12-4 (1770)	2.00	2.00	12.14	12.00	4.28	4.00	—
Royster's Gem Guano 2-12-4 (1910)	2.08	2.00	12.50	12.00	4.16	4.00	—
Royster's Gem Guano 2-12-4 (2000)	2.05	2.00	12.32	12.00	4.05	4.00	—
Royster's Gem Guano 2-12-4 (2174)	2.00	2.00	12.15	12.00	3.94	4.00	—
Royster's Gem Guano 2-12-4 (2199)	2.03	2.00	12.66	12.00	4.30	4.00	—
Royster's Gem Guano 2-12-4 (2261)	2.07	2.00	13.33	12.00	4.31	4.00	—
Royster's Gem Guano 2-12-4 (2279)	2.15	2.00	12.38	12.00	4.02	4.00	—
Royster's Gem Guano 2-12-4 (2435)	2.02	2.00	13.25	12.00	4.14	4.00	—
Royster's Gem Guano 2-12-4 (2465)	2.06	2.00	12.56	12.00	4.10	4.00	—
Royster's Gem Guano 2-12-4 (2606)	2.02	2.00	12.64	12.00	4.04	4.00	—
Royster's Gem Guano 2-12-4 (2629)	2.04	2.00	12.83	12.00	4.48	4.00	—
Royster's Hercules Guano 4-16-4 (1539)	3.85	4.00	16.30	16.00	3.90	4.00	—
Royster's Hercules Guano 4-16-4 (1563)	4.01	4.00	16.48	16.00	4.49	4.00	—
Royster's Hercules Guano 4-16-4 (1835)	4.09	4.00	16.56	16.00	4.04	4.00	—
Royster's Hercules Guano 4-16-4 (2156)	4.13	4.00	16.34	16.00	4.03	4.00	—
Royster's Hercules Guano 4-16-4 (2464)	4.16	4.00	17.04	16.00	12.52	10.00	—
Royster's Prize Guano 4-8-10 (2578)	4.14	4.00	8.59	8.00	7.34	7.00	—
Royster's Quality Trucker 4-8-7 (1316)	4.00	4.00	8.14	8.00	7.30	7.00	—
Royster's Quality Trucker 4-8-7 (1367)	4.08	4.00	8.07	8.00	7.91	7.00	—
Royster's Quality Trucker 4-8-7 (1542)	4.25	4.00	8.20	8.00	7.46	7.00	—
Royster's Quality Trucker 4-8-7 (1562)	4.07	4.00	8.15	8.00	7.06	7.00	—
Royster's Quality Trucker 4-8-7 (1616)	4.00	4.00	8.42	8.00	7.12	7.00	—
Royster's Quality Trucker 4-8-7 (1817)	3.87	4.00	8.02	8.00	6.95	7.00	—
Royster's Quality Trucker 4-8-7 (1832)	4.09	4.00	8.14	8.00	7.54	7.00	—
Royster's Quality Trucker 4-8-7 (1913)	4.18	4.00	8.10	8.00	*6.72	7.00	—
Royster's Quality Trucker 4-8-7 (1998)	4.00	4.00	7.95	8.00	7.24	7.00	—
Royster's Quality Trucker 4-8-7 (2076)	4.09	4.00	8.13	8.00	*6.50	7.00	—
Royster's Quality Trucker 4-8-7 (2173)	3.88	4.00	8.20	8.00	7.06	7.00	—
Royster's Quality Trucker 4-8-7 (2377)	\$3.75	4.00	10.34	8.00	7.06	7.00	—
Royster's Quality Trucker 4-8-7 (2622)	4.02	4.00	8.82	8.00	5.23	5.00	—
Royster's Surety Guano 1-10-5 (1368)	1.03	1.00	10.37	10.00	5.42	5.00	—
Royster's Surety Guano 1-10-5 (1911)	1.01	1.00	10.70	10.00	5.68	5.00	—
Royster's Surety Guano 1-10-5 (2447)	1.11	1.00	11.14	10.00	4.98	6.00	—
Royster's Surety Guano 1-10-5 (2461)	1.06	1.00	10.90	10.00	4.01	4.00	—
Royster's Trojan Guano 4-12-4 (1544)	3.83	4.00	12.12	12.00	4.47	4.00	—
Royster's Trojan Guano 4-12-4 (1561)	4.17	4.00	12.42	12.00	4.72	4.00	—
Royster's Trojan Guano 4-12-4 (1617)	4.10	4.00	12.09	12.00	4.24	4.00	—
Royster's Trojan Guano 4-12-4 (1836)	4.15	4.00	12.09	12.00	4.24	4.00	—
Royster's Trojan Guano 4-12-4 (1999)	4.08	4.00	12.41	12.00	4.07	4.00	—
Royster's Trojan Guano 4-12-4 (2258)	4.00	4.00	13.15	12.00	4.29	4.00	—
Royster's Trojan Guano 4-12-4 (2626)	4.02	4.00	12.37	12.00	4.19	4.00	—
Royster's Trojan Guano 4-12-4 (2628)	4.12	4.00	12.42	12.00	6.22	6.00	—
Royster's 2-12-6 Fertilizer (2075)	2.24	2.00	12.55	12.00	6.27	6.00	—
Royster's 2-12-6 Fertilizer (2200)	2.01	2.00	12.04	12.00	6.45	6.00	—
Royster's 2-12-6 Fertilizer (2446)	2.10	2.00	12.62	12.00	—	—	—
CHARLES H. SEIBERT, Myerstown, Pa.							
Grade #1 2-10-5 (1456)	2.01	2.00	10.06	10.00	4.95	5.00	—
Grade #2 2-8-10 (1455)	1.89	2.00	8.40	8.00	10.43	10.00	—
Grade #3 2-12-6 (1458)	2.00	2.00	11.96	12.00	6.56	6.00	—
Grade #4 4-8-7 (1459)	4.02	4.00	8.50	8.00	7.13	7.00	—
Grade #6 4-10-10 (1460)	4.01	4.00	10.59	10.00	10.94	10.00	—
M. L. SHOEMAKER & CO., INC., Philadelphia, Pa.							
Shoemaker's Swift Sure 1-10-5 (1727)	1.17	1.00	10.27	10.00	5.95	5.00	—
Shoemaker's Swift Sure 1-10-5 (2679)	1.12	1.00	10.43	10.00	5.49	5.00	—
Shoemaker's Swift Sure 2-8-10 (1719)	2.65	2.00	8.01	8.00	10.11	10.00	—
Shoemaker's Swift Sure 2-8-10 (2684)	2.03	2.00	8.39	8.00	10.74	10.00	—
Shoemaker's Swift Sure 2-9-5 (1722)	2.06	2.00	*8.74	9.00	5.06	5.00	—
Shoemaker's Swift Sure 2-9-5 (2682)	2.02	2.00	11.48	9.00	6.07	5.00	—
Shoemaker's Swift Sure 2-10-4 (1724)	2.01	2.00	10.03	10.00	*3.66	4.00	—
Shoemaker's Swift Sure 2-10-4 (2677)	*3.14	2.00	10.16	10.00	4.36	4.00	—
Shoemaker's Swift Sure 2-12-4 (1726)	1.85	2.00	12.26	12.00	4.20	4.00	—
Shoemaker's Swift Sure 2-12-5 (2678)	2.31	2.00	12.40	12.00	5.57	5.00	—
Shoemaker's Swift Sure 3-10-6 (1720)	*2.78	3.00	10.35	10.00	6.64	6.00	—
Shoemaker's Swift Sure 3-10-6 (2686)	3.00	3.00	10.28	10.00	6.13	6.00	—
Shoemaker's Swift Sure 4-8-5 (2685)	4.01	4.00	8.10	8.00	5.24	5.00	—
Shoemaker's Swift Sure 4-8-7 (1721)	4.01	4.00	8.20	8.00	6.83	7.00	—
Shoemaker's Swift Sure 4-8-7 (2676)	4.01	4.00	*7.73	8.00	7.01	7.00	—
Shoemaker's Swift Sure 5-8-5 (1725)	5.02	5.00	8.05	8.00	5.86	5.00	—
Shoemaker's Swift Sure 5-8-5 (2675)	5.29	5.00	8.02	8.00	5.28	5.00	—
Shoemaker's Swift Sure 5-8-7 (1718)	*4.77	5.00	8.26	8.00	6.97	7.00	—
SMITH AGRICULTURAL CHEMICAL CO., Columbus, Ohio							
Sacco 2-8-10 (1399)	2.02	2.00	8.05	8.00	10.42	10.00	—
Sacco 2-8-10 (2059)	2.08	2.00	8.26	8.00	10.32	10.00	—
Sacco 2-12-2 (1397)	2.07	2.00	12.44	12.00	2.20	2.00	—
Sacco 2-12-2 (2058)	2.01	2.00	12.08	12.00	2.09	2.00	—
Sacco 2-12-2 (1398)	2.14	2.00	12.14	12.00	6.01	6.00	—
Sacco 2-16-2 (2055)	2.01	2.00	16.26	16.00	2.01	2.00	—
Sacco 4-8-6 (2060)	4.03	4.00	8.34	8.00	6.13	6.00	—
Sacco 4-8-7 (2062)	3.91	4.00	8.24	8.00	7.80	7.00	—
Sacco 4-12-4 (2057)	4.02	4.00	12.01	12.00	4.16	4.00	—

\*Deficient

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
GOMERSET COUNTY FERTILIZER WORKS, INC., Someret, Pa.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
Beaver Brand Fertilizer 1-10-5 (1324)	1.01	1.00	10.10	10.00	6.15	5.00	---
Beaver Brand Fertilizer 2-8-10 (1322)	2.01	2.00	8.01	8.00	10.01	10.00	---
Beaver Brand Fertilizer 2-9-5 (1320)	2.06	2.00	9.13	9.00	5.72	5.00	---
Beaver Brand Fertilizer 2-12-4 (2627)	2.03	2.00	12.73	12.00	5.01	4.00	---
Beaver Brand Fertilizer 4-8-7 (1321)	4.24	4.00	8.24	8.00	8.75	7.00	---
Beaver Brand Fertilizer 4-8-7 (1326)	4.08	4.00	8.22	8.00	6.98	7.00	---
Beaver Brand Fertilizer 4-8-7 (1330)	4.04	4.00	8.20	8.00	7.87	7.00	---
Beaver Brand Fertilizer 4-8-10 (1326)	4.03	4.00	8.11	8.00	10.72	10.00	---
Beaver Brand Fertilizer 4-8-10 (1329)	3.81	4.00	8.44	8.00	10.17	10.00	---
STANDARD WHOLESALE PHOSPHATE AND ACID WORKS, INC., Baltimore, Md.							
Standard 2-6-10 (2206)	2.29	2.00	8.10	8.00	10.29	10.00	---
Standard 2-9-5 (2203)	2.27	2.00	9.16	8.00	5.80	5.00	---
Standard 2-12-4 (2205)	2.31	2.00	12.06	12.00	5.78	4.00	---
Standard 4-12-4 (2202)	4.11	4.00	12.10	12.00	4.62	4.00	---
SUMMERS FERTILIZER CO., Baltimore, Md.							
2-8-10 Fertilizer (2006)	2.14	2.00	8.02	8.00	*9.49	10.00	---
2-9-6 Fertilizer (2007)	2.08	2.00	9.31	9.00	4.84	5.00	---
2-9-5 Fertilizer (2235)	2.17	2.00	9.26	9.00	5.02	5.00	---
2-12-4 Fertilizer (2011)	2.29	2.00	12.16	12.00	4.17	4.00	---
2-12-4 Fertilizer (2237)	2.30	2.00	12.14	12.00	4.00	4.00	---
4-8-7 Fertilizer (2010)	3.88	4.00	8.17	8.00	7.29	7.00	---
4-8-7 Fertilizer (2236)	3.67	4.00	8.47	8.00	7.49	7.00	---
4-12-4 Fertilizer (2240)	*3.50	4.00	13.37	12.00	4.11	4.00	---
4-12-4 Fertilizer (2366)	4.01	4.00	12.47	12.00	4.01	4.00	---
4-16-4 Fertilizer (2009)	4.45	4.00	16.18	16.00	4.99	4.00	---
4-16-4 Fertilizer (2239)	4.27	4.00	16.20	16.00	4.40	4.00	---
SWACK'S FERTILIZER CO., DuBois, Pa.							
Swack's 1-10-6 (2026)	1.11	1.00	10.34	10.00	5.76	5.00	---
Swack's 2-8-10 (1877)	1.87	2.00	8.41	8.00	10.45	10.00	---
Swack's 2-8-10 (2019)	*1.72	2.00	8.08	8.00	10.29	10.00	---
Swack's 2-8-5 (1878)	1.86	2.00	9.75	9.00	5.47	5.00	---
Swack's 2-9-5 (1779)	2.08	2.00	9.48	9.00	5.12	5.00	---
Swack's 2-9-5 (2020)	1.86	2.00	8.84	9.00	5.95	5.00	---
Swack's 2-9-5 (2083)	2.02	2.00	9.70	9.00	5.01	5.00	---
Swack's 2-9-5 (2609)	2.17	2.00	9.00	9.00	5.63	5.00	---
Swack's 2-12-2 (2021)	1.85	2.00	11.96	12.00	2.95	2.00	---
Swack's 2-12-2 (2049)	2.09	2.00	12.66	12.00	3.13	2.00	---
Swack's 2-12-4 (1781)	2.01	2.00	12.06	12.00	4.86	4.00	---
Swack's 2-12-4 (2023)	1.88	2.00	12.36	12.00	4.42	4.00	---
Swack's 2-12-6 (2022)	1.87	2.00	12.25	12.00	6.86	6.00	---
Swack's 3-12-6 (1675)	2.87	3.00	12.75	12.00	6.46	6.00	---
Swack's 3-12-6 (1777)	3.08	3.00	12.22	12.00	7.97	6.00	---
Swack's 3-12-6 (2024)	2.91	3.00	12.55	12.00	6.00	6.00	---
Swack's 3-12-6 (2051)	3.12	3.00	12.17	12.00	7.23	6.00	---
Swack's 4-8-5 (2048)	*3.37	4.00	8.01	8.00	6.63	5.00	---
Swack's 4-8-7 (1874)	4.02	4.00	8.46	8.00	8.56	7.00	---
Swack's 4-8-7 (1776)	3.90	4.00	8.03	8.00	7.86	7.00	---
Swack's 4-8-7 (2052)	*3.68	4.00	8.24	8.00	7.80	7.00	---
Swack's 4-12-4 (2025)	3.94	4.00	12.36	12.00	*3.63	4.00	---
Swack's 4-12-4 (2050)	3.89	4.00	12.00	12.00	6.42	4.00	---
Swack's 4-16-4 (1778)	4.30	4.00	16.56	16.00	5.66	4.00	---
Swack's 8-16-14 (2027)	8.29	8.00	*15.58	16.00	14.95	14.00	---
SWIFT & COMPANY FERTILIZER WORKS, Baltimore, Md.							
Swift's Red Steer 1-10-5 (1476)	1.30	1.00	10.06	10.00	5.03	5.00	---
Swift's Red Steer 2-8-10 (1332)	2.01	2.00	8.19	8.00	9.98	10.00	---
Swift's Red Steer 2-8-10 (1346)	2.03	2.00	8.44	8.00	10.61	10.00	---
Swift's Red Steer 2-8-10 (1896)	2.00	2.00	8.00	8.00	10.26	10.00	---
Swift's Red Steer 2-8-10 (2136)	2.02	2.00	8.10	8.00	10.01	10.00	---
Swift's Red Steer 2-8-10 (2146)	2.01	2.00	8.30	8.00	9.81	10.00	---
Swift's Red Steer 2-8-10 (2183)	2.23	2.00	8.50	8.00	*8.79	10.00	---
Swift's Red Steer 2-8-10 (2368)	2.87	2.00	8.12	8.00	*6.44	10.00	---
Swift's Red Steer 2-8-10 (2644)	*1.79	2.00	8.87	8.00	10.08	10.00	---
Swift's Red Steer 2-9-5 (1531)	2.04	2.00	9.30	9.00	6.14	5.00	---
Swift's Red Steer 2-9-5 (2159)	2.02	2.00	9.63	9.00	5.31	5.00	---
Swift's Red Steer 2-9-5 (2170)	2.01	2.00	9.17	9.00	5.47	5.00	---
Swift's Red Steer 2-9-5 (2640)	2.02	2.00	10.10	9.00	5.10	5.00	---
Swift's Red Steer 2-12-2 (1895)	2.02	2.00	12.05	12.00	2.09	2.00	---
Swift's Red Steer 2-12-4 (1337)	2.17	2.00	12.06	12.00	4.36	4.00	---
Swift's Red Steer 2-12-4 (1348)	2.10	2.00	12.64	12.00	4.02	4.00	---
Swift's Red Steer 2-12-4 (2673)	2.10	2.00	12.26	12.00	4.97	4.00	---
Swift's Red Steer 2-12-6 (2128)	2.10	2.00	11.94	12.00	*4.98	6.00	---
Swift's Red Steer 2-12-6 (2369)	2.16	2.00	12.28	12.00	6.11	6.00	---
Swift's Red Steer 2-12-6 (2669)	2.21	2.00	12.06	12.00	6.76	6.00	---
Swift's Red Steer 3-12-6 (1898)	3.03	3.00	12.08	12.00	6.25	6.00	---
Swift's Red Steer 3-12-6 (2080)	3.02	3.00	12.04	12.00	6.59	6.00	---
Swift's Red Steer 3-12-6 (2647)	3.06	3.00	12.44	12.00	6.32	6.00	---
Swift's Red Steer 4-8-7 (1473)	3.86	4.00	8.50	8.00	7.26	7.00	---
Swift's Red Steer 4-8-7 (2081)	*3.65	4.00	8.14	8.00	7.84	7.00	---
Swift's Red Steer 4-8-7 (2132)	3.92	4.00	8.08	8.00	7.07	7.00	---
Swift's Red Steer 4-8-7 (2154)	3.86	4.00	8.11	8.00	7.06	7.00	---
Swift's Red Steer 4-8-7 (2184)	4.02	4.00	8.17	8.00	7.30	7.00	---
Swift's Red Steer 4-8-7 (2265)	3.93	4.00	8.29	8.00	7.27	7.00	---
Swift's Red Steer 4-8-7 (2641)	4.30	4.00	8.02	8.00	*6.70	7.00	---
Swift's Red Steer 4-8-8 (1347)	4.01	4.00	8.14	8.00	9.07	8.00	---
Swift's Red Steer 4-8-8 (2672)	3.91	4.00	8.03	8.00	7.82	8.00	---
Swift's Red Steer 4-8-10 (1352)	4.02	4.00	8.25	8.00	19.18	10.00	---
Swift's Red Steer 4-8-10 (2137)	*3.65	4.00	8.03	8.00	10.08	10.00	---
Swift's Red Steer 4-12-4 (1475)	4.88	4.00	12.95	12.00	7.65	4.00	---
Swift's Red Steer 4-12-4 (1845)	4.01	4.00	12.28	12.00	4.33	4.00	---
Swift's Red Steer 4-12-4 (1897)	4.05	4.00	11.96	12.00	4.24	4.00	---
Swift's Red Steer 4-12-4 (2264)	4.01	4.00	12.60	12.00	4.26	4.00	---
Swift's Red Steer 4-12-4 (2301)	4.12	4.00	12.34	12.00	4.46	4.00	---
Swift's Red Steer 4-12-4 (2648)	4.00	4.00	*10.58	12.00	5.77	4.00	---
Swift's Red Steer 4-16-4 (1877)	4.00	4.00	16.04	16.00	4.22	4.00	---
Swift's Red Steer 4-16-4 (2135)	4.29	4.00	*15.66	16.00	4.40	4.00	---
Swift's Red Steer 4-16-4 (2642)	4.28	4.00	*15.04	16.00	4.75	4.00	---

\*Deficient

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
Swift's Red Steer 5-8-5 (2079)	*4.60	5.00	8.15	8.00	5.01	6.00	---
Swift's Red Steer 5-8-5 (2649)	5.02	5.00	8.27	8.00	5.32	5.00	---
Swift's Red Steer 5-8-7 (2671)	5.01	5.00	8.15	8.00	7.36	7.00	---
Swift's Red Steer 5-10-6 (2158)	*4.13	5.00	10.02	10.00	5.78	5.00	---
Swift's Red Steer 5-13-8 (1899)	5.07	5.00	12.86	13.00	7.84	8.00	---
Swift's Red Steer 8-16-14 (1333)	*6.57	8.00	16.76	16.00	*12.76	14.00	---
Swift's Red Steer 8-16-14 (2130)	9.77	8.00	16.46	16.00	*13.18	14.00	---
Swift's Red Steer Tobacco Grower 3-5-12 (2134)	2.87	3.00	5.24	5.00	13.57	12.00	---
Swift's Red Steer Tobacco Grower 4-6-8 (2131)	4.04	4.00	6.07	6.00	6.83	6.00	---
Swift's Red Steer Tobacco Grower 4-8-12 (2133)	3.95	4.00	8.14	8.00	*11.48	12.00	---
Swift's Red Steer Tobacco Grower 4-8-12 (2670)	4.00	4.00	8.32	8.00	12.80	12.00	---
F. W. TUNNELL & CO., INC. Philadelphia, Pa.							
Tunnell's 2-8-10 (1350)	2.21	2.00	8.37	8.00	10.47	10.00	---
Tunnell's 2-8-10 (1710)	2.12	2.00	8.36	8.00	10.85	10.00	---
Tunnell's 2-9-5 (1711)	2.04	2.00	9.16	9.00	5.72	5.00	---
Tunnell's 2-12-4 (1716)	2.17	2.00	12.08	12.00	4.51	4.00	---
Tunnell's 3-8-10 (1714)	3.10	3.00	8.00	8.00	10.46	10.00	---
Tunnell's 3-8-10 (2645)	3.31	3.00	8.05	8.00	10.97	10.00	---
Tunnell's 3-12-6 (2289)	3.29	3.00	12.53	12.00	6.46	6.00	---
Tunnell's 4-8-5 (1715)	4.08	4.00	8.35	8.00	5.41	5.00	---
Tunnell's 4-8-7 (1707)	4.09	4.00	8.08	8.00	7.62	7.00	---
Tunnell's 4-8-10 (1708)	4.01	4.00	8.16	8.00	10.06	10.00	---
Tunnell's 5-8-5 (1713)	5.05	5.00	8.25	8.00	6.29	6.00	---
Tunnell's 5-8-7 (1709)	5.31	5.00	7.98	8.00	7.57	7.00	---
Tunnell's 6-6-5 (1712)	5.95	6.00	6.21	6.00	5.11	5.00	---
Tunnell's Fish Brand 2-10-6 (2194)	2.27	2.00	10.00	10.00	6.57	6.00	---
VIRGINIA-CAROLINA CHEMICAL CORPORATION, Baltimore, Md.							
V-C 1-10-5 Fertilizer (1813)	1.14	1.00	10.28	10.00	5.40	5.00	---
V-C 2-8-11 Fertilizer (2068)	2.00	2.00	8.07	8.00	10.88	10.00	---
V-C 2-9-5 Fertilizer (2065)	2.01	2.00	9.19	9.00	5.59	5.00	---
V-C 2-12-4 Fertilizer (1360)	2.12	2.00	12.66	12.00	3.86	4.00	---
V-C 2-12-4 Fertilizer (2067)	2.01	2.00	12.32	12.00	4.24	4.00	---
V-C 2-12-4 Fertilizer (2143)	2.12	2.00	12.03	12.00	4.44	4.00	---
V-C 2-12-4 Fertilizer (2567)	2.11	2.00	12.39	12.00	4.85	4.00	---
V-C 2-12-6 Fertilizer (2591)	2.20	2.00	12.28	12.00	6.29	6.00	---
V-C 3-12-6 Fertilizer (1357)	3.09	3.00	12.43	12.00	6.18	6.00	---
V-C 3-12-6 Fertilizer (1816)	3.02	3.00	*11.72	12.00	7.06	6.00	---
V-C 3-12-6 Fertilizer (2070)	3.14	3.00	12.24	12.00	6.13	6.00	---
V-C 4-6-7 Fertilizer (1385)	4.06	4.00	8.35	8.00	6.96	7.00	---
V-C 4-8-7 Fertilizer (2003)	3.88	4.00	8.39	8.00	7.67	7.00	---
V-C 4-8-7 Fertilizer (2069)	3.81	4.00	8.10	8.00	7.37	7.00	---
V-C 4-8-7 Fertilizer (2198)	3.88	4.00	8.10	8.00	7.44	7.00	---
V-C 4-8-7 Fertilizer (2413)	4.01	4.00	8.10	8.00	7.20	7.00	---
V-C 4-8-10 Fertilizer (1388)	4.01	4.00	8.38	8.00	10.30	10.00	---
V-C 4-12-4 Fertilizer (2066)	4.00	4.00	11.97	12.00	4.49	4.00	---
V-C 4-16-4 Fertilizer (1831)	4.31	4.00	16.46	16.00	6.38	4.00	---
V-C 4-16-4 Fertilizer (2071)	4.01	4.00	16.02	16.00	4.08	4.00	---
V-C Fish and Potash Mixture 2-9-5 (1747)	2.01	2.00	9.00	9.00	6.07	5.00	---
V-C Fish and Potash Mixture 2-9-5 (1812)	2.01	2.00	9.44	9.00	5.77	5.00	---
V-C Fish and Potash Mixture 2-9-5 (2002)	2.01	2.00	9.30	9.00	5.38	5.00	---
V-C Fish and Potash Mixture 2-9-5 (2393)	2.01	2.00	9.55	9.00	5.30	5.00	---
V-C Fish and Potash Mixture 2-9-5 (2412)	2.14	2.00	9.10	9.00	5.38	5.00	---
V-C Fish and Potash Mixture 2-9-5 (2592)	2.03	2.00	10.06	9.00			
YORK CHEMICAL WORKS, York, Pa.							
Dempwolf's 2-12-4 (1907)	2.22	2.00	12.33	12.00	4.52	4.00	---
Dempwolf's 2-12-4 (1949)	2.07	2.00	*11.80	12.00	4.22	4.00	---
Dempwolf's 2-12-4 (2573)	2.16	2.00	13.74	12.00	4.34	4.00	---
Dempwolf's 3-5-12 for Tobacco (1946)	2.89	3.00	5.14	5.00	13.01	12.00	---
Dempwolf's 4-8-7 (1696)	4.03	4.00	8.57	8.00	7.26	7.00	---
Dempwolf's 4-8-7 (1851)	4.00	4.00	8.43	8.00	7.44	7.00	---
Dempwolf's 4-8-7 (1948)	4.03	4.00	8.38	8.00	7.53	7.00	---
Dempwolf's 4-8-7 (2089)	4.00	4.00	8.23	8.00	7.74	7.00	---
Dempwolf's 4-8-10 (1959)	4.31	4.00	8.18	8.00	10.74	10.00	---
Dempwolf's 4-12-4 (1961)	4.27	4.00	12.15	12.00	4.72	4.00	---
Dempwolf's 4-12-4 (2572)	4.17	4.00	13.22	12.00	4.75	4.00	---
Dempwolf's 4-16-10 (1964)	4.32	4.00	16.20	16.00	10.28	10.00	---
Dempwolf's 5-10-5 (1960)	5.09	5.00	10.47	10.00	5.30	5.00	---
Dempwolf's General Crop 3-12-6 (1906)	3.13	3.00	12.35	12.00	6.39	6.00	---
Dempwolf's General Crop 3-12-6 (1950)	3.05	3.00	12.16	12.00	6.09	6.00	---
Dempwolf's General Crop 3-12-6 (2090)	3.02	3.00	12.50	12.00	6.79	6.00	---
Dempwolf's General Crop 3-12-6 (2590)	3.27	3.00	12.20	12.00	6.81	6.00	---
Dempwolf's Grain Special 2-12-2 (1962)	2.07	2.00	12.02	12.00	2.92	2.00	---
Dempwolf's High Teet 8-16-14 (1965)	8.15	8.00	16.26	16.00	15.15	14.00	---
Dempwolf's Potato and Truck 5-8-7 (1646)	4.92	5.00	8.74	8.00	7.48	7.00	---
Dempwolf's Potato and Truck 5-8-7 (2088)	5.12	5.00	8.13	8.00	7.32	7.00	---
Dempwolf's Spring Special 2-8-10 (1695)	1.89	2.00	8.09	8.00	10.18	10.00	---
Dempwolf's Spring Special 2-8-10 (1955)	2.07	2.00	8.24	8.00	11.00	10.00	---
Dempwolf's Standard 2-9-5 (1628)	2.06	2.00	9.22	9.00	5.16	5.00	---
Dempwolf's Standard 2-9-5 (1645)	2.13	2.00	9.14	9.00	5.48	5.30	---
Dempwolf's Standard 2-9-5 (1697)	2.19	2.00	9.14	9.00	5.63	5.00	---
Dempwolf's Standard 2-9-5 (1953)	2.20	2.00	9.06	9.00	5.71	5.00	---
Dempwolf's Standard 2-9-5 (2589)	2.02	2.00	9.78	9.00	5.19	5.00	---
Dempwolf's Standard Potash 1-10-5 (1958)	1.25	1.00	10.30	10.00	5.70	5.00	---
Dempwolf's Tobacco Special 5-8-7 (1947)	4.85	5.00	8.38	8.00	7.40	7.00	---
Dempwolf's Top Dresser 6-6-5 (1963)	*5.52	6.00	6.36	6.00	5.60	5.00	---
Dempwolf's Top Dresser 6-6-5 (2091)	5.89	6.00	6.55	6.00	5.56	6.00	---
Average	3.16	----	10.62	----	6.59	----	---

\*Deficient

TABLE IV. GROUND BONE FERTILIZERS—FURNISHING NITROGEN AND PHOSPHORIC ACID

MANUFACTURER AND BRAND NAME	NITROGEN		PHOSPHORIC ACID	
	Found P. ct.	Guar. P. ct.	Found P. ct.	Guar. P. ct.
ACME GUANO CO., Baltimore, Md. Acme Raw Bone (2637)	4.09	3.70	22.70	20.00
AMERICAN AGRICULTURAL CHEMICAL CO., New York, N.Y. Fine Ground Bone (1658)	2.74	2.47	26.10	23.00
ARMOUR FERTILIZER WORKS, Baltimore, Md. Armour's Raw Bone Meal (2620)	3.79	3.70	20.60	20.50
BAUGH & SONS CO., Baltimore, Md. Baugh's Pure Steamed Bone Meal (1828)	2.76	2.47	23.60	23.00
Baugh's Raw Bone Meal (1827)	4.09	3.70	21.00	20.50
Baugh's Raw Bone Meal (2180)	4.02	3.70	21.00	20.50
Baugh's Raw Bone Meal (2303)	3.77	3.70	20.60	20.50
Baugh's Raw Bone Meal (2539)	3.76	3.70	*20.20	20.50
COOPERATIVE G.L.F. SOIL BLDG. SERVICE, INC. New York, N.Y. G.L.F. Quality Raw Bone Meal (1880)	4.68	3.70	23.20	23.00
DAVISON CHEMICAL CO., Baltimore, Md. Pure Raw Bone (1849)	4.38	3.70	20.85	20.00
INDEPENDENT MANUFACTURING CO., Philadelphia, Pa. Independent's Bone Meal (2663)	3.85	3.70	22.00	21.00
F. S. ROYSTER GUANO CO., Baltimore, Md. Royster's Fine Ground Bone Meal (2190)	3.57	2.47	23.10	22.90
Royster's Fine Ground Bone Meal (2278)	3.87	2.47	23.10	22.90
Royster's Raw Bone Meal (1661)	5.60	3.70	20.80	20.60
Royster's Raw Bone Meal (1821)	3.63	3.70	20.70	20.60
Royster's Raw Bone Meal (1833)	3.77	3.70	20.70	20.60
Royster's Raw Bone Meal (2175)	3.53	3.70	21.30	20.60
M. L. SHOEMAKER, INC., Philadelphia, Pa. Shoemaker's Swift Sure Fine Ground Bone (2697)	2.85	2.47	23.90	23.00
Shoemaker's Swift Sure Raw Bone Meal (2680)	4.23	3.70	20.70	20.00
SWACK FERTILIZER CO., DuBois, Pa. Swack's Bone Meal (1780)	2.78	2.47	23.15	23.00
SWIFT & COMPANY, Baltimore, Md. Bone Meal Fertilizer (2643)	2.47	2.47	24.25	23.00
Swift's 2-26 Bone Fertilizer (187B)	2.00	2.00	26.20	26.00
Swift's 2-26 Bone Fertilizer (2530)	2.08	2.00	27.60	26.00
Swift's 2-26 Bone Fertilizer (2544)	2.00	2.00	27.50	26.00
Average	3.43	----	22.70	----

\*Deficient

TABLE V. SUPERPHOSPHATE AND LIME PHOSPHATE FERTILIZERS—FURNISHING PHOSPHORIC ACID

MANUFACTURER AND BRAND NAME	PHOSPHORIC ACID					
	Total		Available		Insoluble	
	Found P.ct.	Guar. P.ct.	Found P.ct.	Guar. P.ct.	Found P.ct.	Guar. P.ct.
<u>SUPERPHOSPHATE FERTILIZERS</u>						
ACME GUANO COMPANY, Baltimore, Md. Acme 16% Superphosphate (1972)			16.16	16.00		
AMERICAN AGRICULTURAL CHEMICAL CO. New York, N. Y.						
AA Superphosphate 16% (1366)			16.30	16.00		
AA Superphosphate 16% (1393)			16.34	16.00		
AA Superphosphate 16% (1421)			16.68	16.00		
AA Superphosphate 16% (1480)			16.34	16.00		
AA Superphosphate 16% (1533)			16.84	16.00		
AA Superphosphate 16% (1556)			17.00	16.00		
AA Superphosphate 16% (1655)			16.42	16.00		
AA Superphosphate 16% (1903)			16.50	16.00		
AA Superphosphate 16% (2270)			16.97	16.00		
AA Superphosphate 16% (2294)			16.96	16.00		
AA Superphosphate 16% (2310)			16.99	16.00		
AA Superphosphate 16% (2321)			16.18	16.00		
AA Superphosphate 16% (2394)			16.22	16.00		
AA Superphosphate 16% (2458)			16.96	16.00		
AA Superphosphate 16% (2526)			17.05	16.00		
AA Superphosphate 16% (2536)			16.64	16.00		
AA Superphosphate 16% (2562)			17.50	16.00		
AA Superphosphate 16% (2575)			16.92	16.00		
AA Superphosphate 16% (2612)			16.96	16.00		
AA Superphosphate 20% (1420)			21.56	20.00		
AA Superphosphate 20% (1481)			20.18	20.00		
AA Superphosphate 20% (1600)			20.60	20.00		
AA Superphosphate 20% (1638)			20.80	20.00		
AA Superphosphate 20% (1650)			21.02	20.00		
AA Superphosphate 20% (1654)			20.26	20.00		
AA Superphosphate 20% (2252)			20.35	20.00		
AA Superphosphate 20% (2269)			20.42	20.00		
AA Superphosphate 20% (2434)			20.04	20.00		
AA Superphosphate 20% (2491)			20.16	20.00		
AA Superphosphate 20% (2561)			21.48	20.00		
AA Superphosphate 20% (2574)			21.34	20.00		
AA Superphosphate 20% (2613)			20.16	20.00		
ARMOUR FERTILIZER WORKS, Baltimore, Md.						
Armour's Big Crop Superphosphate 16% (1371)			16.32	16.00		
Armour's Big Crop Superphosphate 16% (1510)			16.92	16.00		
Armour's Big Crop Superphosphate 16% (1521)			17.22	16.00		
Armour's Big Crop Superphosphate 16% (1667)			16.15	16.00		
Armour's Big Crop Superphosphate 16% (1802)			16.64	16.00		
Armour's Big Crop Superphosphate 16% (1922)			16.84	16.00		
Armour's Big Crop Superphosphate 16% (2221)			16.64	16.00		
Armour's Big Crop Superphosphate 16% (2445)			17.10	16.00		
Armour's Big Crop Superphosphate 16% (2552)			16.10	16.00		
Armour's Big Crop Superphosphate 16% (2618)			16.82	16.00		
Armour's Big Crop Superphosphate 20% (1531)			20.68	20.00		
Armour's Big Crop Superphosphate 20% (1665)			20.28	20.00		
Armour's Big Crop Superphosphate 20% (1803)			20.14	20.00		
Armour's Big Crop Superphosphate 20% (1842)			20.08	20.00		
Armour's Big Crop Superphosphate 20% (1921)			20.62	20.00		
Armour's Big Crop Superphosphate 20% (2514)			20.58	20.00		
Armour's Big Crop Superphosphate 20% (2554)			20.02	20.00		
Armour's Big Crop Superphosphate 20% (2616)			21.24	20.00		
Armour's Big Crop Superphosphate 20% (2653)			21.22	20.00		
BALTIMORE FERTILIZER CO., Baltimore, Md.						
Honest 16% Superphosphate (1918)			16.54	16.00		
Honest 16% Superphosphate (2492)			17.20	16.00		
Honest 20% Superphosphate (1933)			20.12	20.00		
Honest 20% Superphosphate (2473)			22.26	20.00		
BAUGH & SONS CO., Baltimore, Md.						
Baughphos The Ideal 16% Superphosphate (1568)			16.28	16.00		
Baughphos The Ideal 16% Superphosphate (1699)			16.32	16.00		
Baughphos The Ideal 16% Superphosphate (1806)			16.62	16.00		
Baughphos The Ideal 16% Superphosphate (1862)			16.56	16.00		
Baughphos The Ideal 16% Superphosphate (2104)			16.54	16.00		
Baughphos The Ideal 16% Superphosphate (2313)			16.88	16.00		
Baughphos The Ideal 16% Superphosphate (2440)			16.24	16.00		
Baughphos The Ideal 16% Superphosphate (2580)			16.58	16.00		
Baughphos The Ideal 16% Superphosphate (1341)			18.26	18.00		
Baughphos The Ideal 20% Superphosphate (1808)			20.04	20.00		
Baughphos The Ideal 20% Superphosphate (2052)			20.46	20.00		
Baughphos The Ideal 20% Superphosphate (2062)			20.88	20.00		
Baughphos The Ideal 20% Superphosphate (2315)			20.72	20.00		
Baughphos The Ideal 20% Superphosphate (2439)			20.58	20.00		
HERBERT BRYANT, INC., Alexandria, Va.						
Bryant's E-B 16% Superphosphate (2585)			16.20	16.00		
16% High Grade Acid Phosphate (1735)			17.16	16.00		
16% High Grade Acid Phosphate (2397)			16.10	16.00		
20% Highest Grade Acid Phosphate (1736)			20.24	20.00		
CARLISLE FERTILIZER WORKS, Carlisle, Pa.						
Carlisle Superphosphate 16% (2474)			17.36	16.00		
CENTRAL CHEMICAL CORP. OF MARYLAND Hagerstown, Md.						
Farmrite Superphosphate 20% (2503)			21.20	20.00		
Farmrite Superphosphate 20% (2602)			21.10	20.00		
COOP. G.L.F. SOIL BLDG. SERVICE New York, N. Y.						
G.L.F. Superphosphate 16% (1570)			16.10	16.00		
G.L.F. Superphosphate 16% (2044)			16.20	16.00		
G.L.F. Superphosphate 20% (1576)			20.52	20.00		
G.L.F. Superphosphate 20% (2433)			20.40	20.00		
G.L.F. Superphosphate 20% (2570)			20.32	20.00		

TABLE V. SUPERPHOSPHATE AND LIME PHOSPHATE FERTILIZERS—FURNISHING PHOSPHORIC ACID

MANUFACTURER AND BRAND NAME	PHOSPHORIC ACID					
	Total		Available		Insoluble	
	Found P. ct.	Guar. P. ct.	Found P. ct.	Guar. P. ct.	Found P. ct.	Guar. P. ct.
G.L.F. Superphosphates 20% (1854)			20.46	20.00		
G.L.F. Superphosphate 20% (1882)			20.06	20.00		
G.L.F. Superphosphates 32% (2671)			*31.26	32.00		
CUMBERLAND VALLEY COOPERATIVE ASSOCIATION Shippensburg, Penna.						
Old Reliable Superphosphate 16% (1596)			16.10	16.00		
Old Reliable Superphosphates 16% (2479)			16.30	16.00		
Old Reliable Superphosphate 20% (1697)			20.18	20.00		
Old Reliable Superphosphate 20% (2477)			20.60	20.00		
DAVISON CHEMICAL CO., Baltimore, Md.						
Davco Superphosphate 16% (1646)			16.18	16.00		
Davco Superphosphate 16% (1880)			16.30	16.00		
Davco Superphosphates 16% (1871)			16.42	16.00		
Davco Superphosphates 16% (2092)			16.14	16.00		
Davco Superphosphate 16% (2213)			16.02	16.00		
Davco Superphosphate 16% (2223)			15.85	16.00		
Davco Superphosphates 16% (2266)			16.44	16.00		
Davco Superphosphate 16% (2327)			16.54	16.00		
Davco Superphosphates 20% (1406)			20.88	20.00		
Davco Granulated Superphosphate 20% (1441)			20.76	20.00		
Davco Granulated Superphosphate 20% (1670)			20.14	20.00		
Davco Granulated Superphosphate 20% (1786)			20.82	20.00		
Davco Granulated Superphosphate 20% (1848)			20.68	20.00		
Davco Granulated Superphosphate 20% (1860)			20.70	20.00		
Davco Granulated Superphosphate 20% (2216)			20.50	20.00		
Davco Granulated Superphosphate 20% (2227)			20.18	20.00		
Davco Granulated Superphosphate 20% (2230)			20.50	20.00		
Davco Granulated Superphosphate 20% (2268)			20.60	20.00		
Davco Granulated Superphosphate 20% (2328)			20.88	20.00		
Davco Granulated Superphosphate 20% (2567)			20.78	20.00		
Davco Granulated Superphosphate 20% (2525)			20.20	20.00		
Davco Granulated Superphosphate 20% (2614)			20.08	20.00		
Davison Superphosphate 16% (1408)			16.79	16.00		
Davison Superphosphate 16% (1437)			17.28	16.00		
Davison Superphosphate 16% (1881)			16.96	16.00		
Davison Superphosphate 16% (2228)			16.03	16.00		
Oro-All Dissolved Phosphates 16% (1986)			16.28	16.00		
Miller Superphosphates 16% (1943)			16.14	16.00		
EASTERN STATES FARMERS EXCHANGE Springfield, Mass.						
Eastern States 20% Granulated Superphosphate (1941)			20.06	20.00		
Eastern States 20% Superphosphate (1680)			20.08	20.00		
Eastern States Superphosphate Pulverized 20% (1940)			20.08	20.00		
Eastern States 40% Double Superphosphate (1493)			40.12	40.00		
Eastern States 40% Double Superphosphate (1687)			40.70	40.00		
AMOS EBY & COMPANY, Leaman Place, Pa.						
Eby Superphosphate 16% (2124)			16.70	16.00		
FARMERS FERTILIZER WORKS, Elizabethtown, Pa.						
Farmers Acid Phosphate 16% (1457)			16.08	16.00		
Farmers Acid Phosphate 16% (1766)			18.06	16.00		
Farmers Acid Phosphate 16% (2337)			16.70	16.00		
Farmers Acid Phosphate 20% (2358)			20.42	20.00		
GRIFFITH & BOYD CO., Baltimore, Md.						
High Grade 16% Acid Phosphate (1395)			16.40	16.00		
High Grade 18% Acid Phosphate (1888)			16.14	16.00		
High Grade 16% Acid Phosphate (2018)			16.24	16.00		
High Grade 16% Acid Phosphate (2246)			17.14	16.00		
High Grade 16% Acid Phosphate (2593)			17.54	16.00		
20% Acid Phosphate (1889)			21.80	20.00		
20% Acid Phosphate (2244)			20.86	20.00		
INDEPENDENT MANUFACTURING CO. Philadelphia, Pa.						
Independent 16% Superphosphate (2632)			16.16	16.00		
INTERNATIONAL AGRICULTURAL CORPORATION Buffalo, N.Y.						
International 18% Superphosphate (2046)			16.44	16.00		
International 18% Superphosphate (2165)			16.42	16.00		
LEBANON FERTILIZER WORKS, Lebanon, Pa.						
Levan's Superphosphate 16% (2118)			16.48	16.00		
Levan's Superphosphate 16% (2354)			16.04	16.00		
Levan's Superphosphate 20% (2107)			21.16	20.00		
Levan's Superphosphate 20% (2345)			20.10	20.00		
PENNA. FARM BUREAU COOPERATIVE ASS'N., INC. Harrisburg, Pa.						
Farm Bureau 16% Superphosphate (1409)			16.12	16.00		
Farm Bureau 16% Superphosphate (1603)			16.56	16.00		
Farm Bureau 20% Superphosphate (1413)			20.00	20.00		
READING SODA FERTILIZER CO., Reading, Pa.						
16% Clear Acid Phosphate (1485)			17.02	16.00		
16% Clear Acid Phosphate (1579)			16.18	16.00		
20% Clear Acid Phosphate (1484)			20.42	20.00		
20% Clear Acid Phosphate (1580)			20.08	20.00		
ROBERT A REICHARD, INC., Allentown, Pa.						
Reichard's Famous 16% Acid Phosphate (2306)			16.72	16.00		

\*Deficient

TABLE V. SUPERPHOSPHATE AND LIME PHOSPHATE FERTILIZERS—FURNISHING PHOSPHORIC ACID

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MANUFACTURER AND BRAND NAME	PHOSPHORIC ACID					
	Total		Available		Insoluble	
	Found P. ct.	Guar. P. ct.	Found P. ct.	Guar. P. ct.	Found P. ct.	Guar. P. ct.
F. S. ROYSTER GUANO CO., Baltimore, Md.						
Royster Superphosphate 16% (1319)			16.30	16.00		
Royster Superphosphate 16% (1543)			16.80	16.00		
Royster Superphosphate 16% (1664)			16.18	16.00		
Royster Superphosphate 16% (1633)			16.36	16.00		
Royster Superphosphate 16% (1619)			16.14	16.00		
Royster Superphosphate 16% (1834)			16.50	16.00		
Royster Superphosphate 16% (1908)			16.58	16.00		
Royster Superphosphate 16% (2001)			16.24	16.00		
Royster Superphosphate 16% (2172)			16.24	16.00		
Royster Superphosphate 16% (2259)			16.58	16.00		
Royster Superphosphate 16% (2466)			16.78	16.00		
Royster Superphosphate 16% (2676)			17.44	16.00		
Royster Superphosphate 16% (2604)			16.80	16.00		
Royster Superphosphate 16% (2639)			16.20	16.00		
Royster Superphosphate 16% (2661)			19.44	18.00		
Royster Superphosphate 20% (1548)			20.32	20.00		
Royster Superphosphate 20% (1818)			20.96	20.00		
Royster Superphosphate 20% (1838)			20.86	20.00		
Royster Superphosphate 20% (1912)			20.78	20.00		
Royster Superphosphate 20% (2187)			20.04	20.00		
Royster Superphosphate 20% (2260)			20.30	20.00		
Royster Superphosphate 20% (2600)			20.68	20.00		
Royster Superphosphate 20% (2603)			21.13	20.00		
Royster Superphosphate 20% (2660)			20.28	20.00		
M. L. SHOEMAKER & CO., INC.						
Philadelphia, Penna.						
Shoemaker's Swift Sure 16% Superphosphate (1723)			16.62	16.00		
Shoemaker's Swift Sure 16% Superphosphate (2663)			16.12	16.00		
THE SMITH AGRICULTURAL CHEMICAL CO.						
Columbus, Ohio						
Smith's Sacco 16% (1400)			16.88	16.00		
Smith's Sacco 16% (2061)			16.12	16.00		
Smith's Sacco 20% (1401)			20.64	20.00		
Smith's Sacco 20% (2056)			20.40	20.00		
SOMERSET COUNTY FERTILIZER WORKS						
Somerset, Penna.						
Seaver Brand Fertilizer 20% (1323)			20.51	20.00		
Seaver Grand Fertilizer 20% (2826)			21.68	20.00		
STANDARD WHOLESALE PHOSPHATE & ACID WORKS						
Baltimore, Md.						
Standard 16% Superphosphate (1539)			16.36	16.00		
Standard 16% Superphosphate (2204)			16.22	16.00		
Standard 20% Superphosphate (2207)			20.42	20.00		
SUMMERS FERTILIZER CO., Baltimore, Md.						
16% Superphosphate (2005)			16.22	16.00		
16% Superphosphate (2236)			16.52	16.00		
16% Superphosphate (2361)			16.28	16.00		
20% Superphosphate (2012)			20.20	20.00		
20% Superphosphate (2234)			20.92	20.00		
SWACK FERTILIZER CO., DuBois, Penna.						
Swack's Superphosphate 16% (1775)			16.12	16.00		
Swack's Superphosphate 16% (1876)			16.56	16.00		
Swack's Superphosphate 20% (1676)			20.46	20.00		
Swack's Superphosphate 20% (1774)			20.90	20.00		
Swack's Superphosphate 20% (2054)			20.40	20.00		
SWIFT & CO., Baltimore, Md.						
Swift's Red Steer Superphosphate 16% (1334)			16.42	16.00		
Swift's Red Steer Superphosphate 16% (1843)			16.48	16.00		
Swift's Red Steer Superphosphate 16% (2077)			16.34	16.00		
Swift's Red Steer Superphosphate 16% (2127)			16.50	16.00		
Swift's Red Steer Superphosphate 16% (2191)			16.84	16.00		
Swift's Red Steer Superphosphate 16% (2211)			16.27	16.00		
Swift's Red Steer Superphosphate 16% (2276)			16.92	16.00		
Swift's Red Steer Superphosphate 16% (2370)			16.84	16.00		
Swift's Red Steer Superphosphate 16% (2621)			17.00	16.00		
Swift's Red Steer Superphosphate 20% (1336)			20.16	20.00		
Swift's Red Steer Superphosphate 20% (1844)			20.72	20.00		
Swift's Red Steer Superphosphate 20% (2076)			20.36	20.00		
Swift's Red Steer Superphosphate 20% (2160)			20.60	20.00		
Swift's Red Steer Superphosphate 20% (2176)			20.44	20.00		
Swift's Red Steer Superphosphate 20% (2275)			20.28	20.00		
Swift's Red Steer Superphosphate 20% (2650)			20.28	20.00		
P. W. TUNNELL & CO., INC., Philadelphia, Penna.						
Tunnell's 16% Superphosphate (2646)			16.14	16.00		
VIRGINIA-CAROLINA CHEMICAL CORPORATION						
Baltimore, Md.						
V-C 16% Superphosphate (1815)			16.14	16.00		
V-C 16% Superphosphate (2004)			16.32	16.00		
V-C 16% Superphosphate (2063)			16.38	16.00		
V-C 16% Superphosphate (2454)			16.88	16.00		
V-C 20% Superphosphate (2064)			20.54	20.00		
V-C 20% Superphosphate (2452)			20.52	20.00		
WYOMING CHEMICAL WORKS, York, Penna.						
Dempwolf's Superphosphate 16% (1644)			16.62	16.00		
Dempwolf's Superphosphate 16% (1954)			16.36	16.00		
Dempwolf's Superphosphate 16% (1996)			16.36	16.00		
Dempwolf's Superphosphate 16% (2588)			17.16	16.00		
Dempwolf's Superphosphate 20% (1852)			21.52	20.00		
Dempwolf's Superphosphate 20% (1967)			20.90	20.00		
Dempwolf's Superphosphate 20% (1995)			20.74	20.00		
Average			18.63	-----		

TABLE V. SUPERPHOSPHATE AND LIME PHOSPHATE FERTILIZERS—FURNISHING PHOSPHORIC ACID

MANUFACTURER AND BRAND NAME	PHOSPHORIC ACID					
	Total		Available		Insoluble	
	Found	Guar.	Found	Guar.	Found	Guar.
<u>LIME PHOSPHATE FERTILIZERS</u>						
ACME GUANO COMPANY, Baltimore, Md. Acme Lime Phosphate 16% (1975)			16.98	16.00		
AMERICAN AGRICULTURAL CHEMICAL CO., New York, N.Y. AA Basic Lime Phosphate 16% (1699) AA Basic Lime Phosphate 16% (1763)			16.74 16.56	16.00 16.00		
ARMOUR FERTILIZER WORKS, Baltimore, Md. Armour's Big Crop Lime Phosphate 16% (1923)			16.08	16.00		
BAUGR & SONS CO., Baltimore, Md. Baugh's Lime & Phosphate 16% (2167) Baugh's Lime & Phosphate 16% (2441)			16.23 17.92	16.00 16.00		
CARLISLE FERTILIZER WORKS, INC., Carlisle, Pa. Carlisle Lime Phosphate 16% (1592) Carlisle Lime Phosphate 16% (2470)			16.26 17.66	16.00 16.00		
DAVISON CHEMICAL CO., Baltimore, Md. Daveco 16% Lime Phosphate (1312) Daveco 16% Lime Phosphate (1450) Gro-All Carbo Lime Phosphate 16% (19B2)			16.20 16.00 16.10	16.00 16.00 16.00		
ORIFFITR & BOYD CO., Baltimore, Md. Lime Phosphate (2290)			16.14	16.00		
LEBANON FERTILIZER WORKS, Lebanon, Pa. Levan's Lime Phosphate 16% (2109) Levan's Lime Phosphate 16% (2347)			16.96 16.08	16.00 16.00		
SUMMERS FERTILIZER CO., Baltimore, Md. 16% Lime Phosphate (2355)			16.42	16.00		
VIRGINIA-CAROLINA CHEMICAL CORPORATION Baltimore, Md. V-C 16% Phosphate & Lime Mixture (13B3) V-C 16% Phosphate & Lime Mixture (2453)			16.48 16.14	16.00 16.00		
YORK CHEMICAL WORKS, York, Pa. Dempwolf's Lime Phosphate 16% (1956)			16.24	16.00		
Average			16.50	-----		

TABLE VI. ROCK AND POTASH FERTILIZERS—FURNISHING PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	As Muricate
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
ACME GUANO CO., Baltimore, Md. Acme O-12-5 (1971) Acme O-12-5 (2659)	*11.23 12.62	12.00 12.00	5.94 5.74	5.00 5.00	----
THE AMERICAN AGRICULTURAL CHEMICAL CO., New York, N. Y. AA Victory Mixture O-12-5 (1478) AA Victory Mixture C-12-5 (1637) AA Victory Mixture O-12-5 (1829) AA Victory Mixture O-12-5 (2041) AA Victory Mixture O-12-5 (2422) AA XXX Mixture O-10-10 (1636)	12.44 12.26 12.05 12.30 12.10 10.34	12.00 12.00 12.00 12.00 12.00 10.00	5.47 5.01 5.70 5.42 5.74 10.67	5.00 5.00 5.00 5.00 5.00 10.00	----
ARMOUR FERTILIZER WORKS, Baltimore, Md., Armour's Big Crop Fertilizer O-10-10 (1519) Armour's Big Crop Fertilizer O-12-5 (1372) Armour's Big Crop Fertilizer O-12-5 (1767) Armour's Big Crop Fertilizer O-12-5 (1926) Armour's Big Crop Fertilizer O-12-5 (2209)	*8.40 12.55 12.30 12.12 12.68	10.00 12.00 12.00 12.00 12.00	10.71 5.48 5.05 4.95 4.82	10.00 5.00 5.00 5.00 5.00	----
BALTIMORE FERTILIZER CO., Baltimore, Md. Honest O-12-5 (1589) Honest O-12-5 (2472)	12.15 12.59	12.00 12.00	6.55 5.42	5.00 5.00	----
BAUGH & SONS CO., Philadelphia, Pa. Baugh's Phosphate and Potash Mixture O-12-5 (1622) Baugh's Phosphate and Potash Mixture O-12-5 (2083) Baugh's Phosphate and Potash Mixture O-12-5 (2371) Baugh's Phosphate and Potash Mixture O-12-5 (2442) Baugh's Phosphate and Potash Mixture O-12-5 (2579)	12.39 12.29 12.52 12.53 12.48	12.00 12.00 12.00 12.00 12.00	5.24 5.04 5.02 5.09 5.05	5.00 5.00 5.00 5.00 5.00	----
HERBERT BRYANT, INCORPORATED Alexandria, Va. Bryants Inc. Phosphate and Potash O-12-5 (2385)	12.12	12.00	5.72	5.00	----
CENTRAL CHEMICAL CORPORATION OF MARYLAND, Hagerstown, Md. Farmrite Potash Special O-12-5 (2507)	12.48	12.00	5.43	5.00	----
COOPERATIVE G.L.F. SOIL BUILDING SERVICE, INC., New York, N. Y. G.L.F. O-14-6 (1643)	14.50	14.00	6.30	6.00	----
CUMBERLAND VALLEY COOPERATIVE ASSOCIATION, Shippensburg, Pa. Old Reliable Valley Special O-12-5 (1594) Old Reliable Valley Special O-12-5 (2476)	12.17 11.98	12.00 12.00	5.98 5.46	5.00 5.00	----
THE DAVISON CHEMICAL CORPORATION, Baltimore, Md. Davco O-10-10 Fertilizer (1792) Davco O-12-5 Fertilizer (1759) Davco O-12-5 Fertilizer (1790) Davco Homogenecus Granulated Fertilizer O-12-5 (1444) Cro-All Potash Special O-12-5 (1987) Miller Fertilizer O-12-5 (1944)	10.00 11.94 12.10 12.06 *11.88 12.01	10.00 12.00 12.00 12.00 12.00 12.00	10.73 5.39 5.03 5.59 5.32 5.55	10.00 5.00 5.00 5.00 5.00 5.00	----
EASTERN STATES FARMERS EXCHANGE, Springfield, Mass. Eastern States O-14-6 (1937) Eastern States O-20-20 (2426) Eastern States O-28-12 (1685) Eastern States O-28-12 (1689) Eastern States O-28-12 (2427)	15.44 20.28 28.91 *27.44 28.64	14.00 20.00 28.00 28.00 28.00	7.13 21.22 12.18 12.76 13.92	6.00 20.00 12.00 12.00 12.00	----
AMOS EBY & CO., Leaman Place, Pa. Eby Farmers Mixture O-12-5 (2119)	12.22	12.00	5.75	5.00	----
FARMERS' FERTILIZER WORKS, Elizabethtown, Pa. Farmers Phosphate and Potash O-12-5 (1465) Farmers Phosphate and Potash O-12-5 (2333)	12.14 12.04	12.00 12.00	5.40 5.33	5.00 5.00	----
LANCASTER BONE FERTILIZER CO., Inc. Quarryville, Pa. Conestoga O-12-5 (1466)	13.03	12.00	5.66	5.00	----
LEBANON FERTILIZER WORKS, Lebanon, Pa. Levan's O-12-5 (1745) Leven's O-12-5 (2108) Levan's O-12-5 (2343)	12.09 12.07 11.97	12.00 12.00 12.00	5.57 5.36 5.37	5.00 5.00 5.00	----
PENNSYLVANIA FARM BUREAU COOPERATIVE ASSOCIATION, INC., Harrisburg, Pa. Farm Bureau O-10-10 (2395) Farm Bureau O-12-5 (1499)	10.26 12.20	10.00 12.00	10.83 5.08	10.00 5.00	----
READING BONE FERTILIZER CO., Reading, Pa. Reading Phosphate and Potash O-12-5 (1583)	12.30	12.00	4.81	5.00	----
F. S. ROYSTER GUANO CO., Baltimore, Md. Royster Phosphate and Potash O-10-10 (2155) Royster Phosphate and Potash O-10-10 (2189) Royster Phosphate and Potash O-12-5 (1771) Royster Phosphate and Potash O-12-5 (1914)	10.26 10.41 12.35 12.15	10.00 10.00 12.00 12.00	10.16 10.50 5.73 5.17	10.00 10.00 5.00 5.00	----

\*Deficient

TABLE VI. ROCK AND POTASH FERTILIZERS—FURNISHING PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	As Muricate
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
SOMERSET COUNTY FERTILIZER WORKS, INC., Somerset, Pa. Beaver Brand Fertilizer 0-12-5 (1327)	12.15	12.00	5.00	5.00	----
SUMMERS FERTILIZER CO., INC. Baltimore, Md. Summers 0-12-5 Fertilizer (2008)	12.19	12.00	5.49	5.00	----
SWIFT & COMPANY FERTILIZER WORKS, Baltimore, Md. Swift's Red Steer 0-12-5 (1351) Swift's Red Steer 0-12-5 (1474) Swift's Red Steer 0-12-5 (2128)	12.17 12.18 12.00	12.00 12.00 12.00	5.30 5.57 5.40	5.00 5.00 5.00	----
P. W. TUNNELL & COMPANY, INC., Philadelphia, Pa. Tunnell's Fertilizer 0-12-5 (1349)	12.15	12.00	5.93	5.00	----
VIRGINIA - CAROLINA CREMICAL CORPORATION Baltimore, Md. V-C 0-12-5 Fertilizer (1359) V-O 0-12-5 Fertilizer (1384) V-C 0-12-5 Fertilizer (1814) V-C 0-12-5 Fertilizer (2035)	12.19 12.02 12.23 12.45	12.00 12.00 12.00 12.00	5.48 5.64 5.57 5.33	5.00 5.00 5.00 5.00	----
YORK CHEMICAL WORKS, York, Pa. Dempwolf's 0-10-10 (1962) Dempwolf's 0-12-5 (1951)	11.93 12.16	10.00 12.00	10.50 4.94	10.00 5.00	----
Average	13.01	-----	5.55	-----	-----

TABLE VII. MISCELLANEOUS FERTILIZERS

